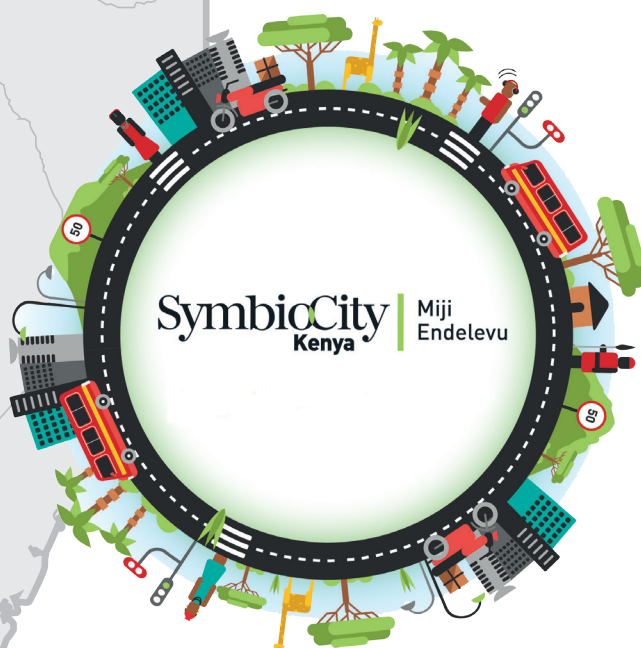
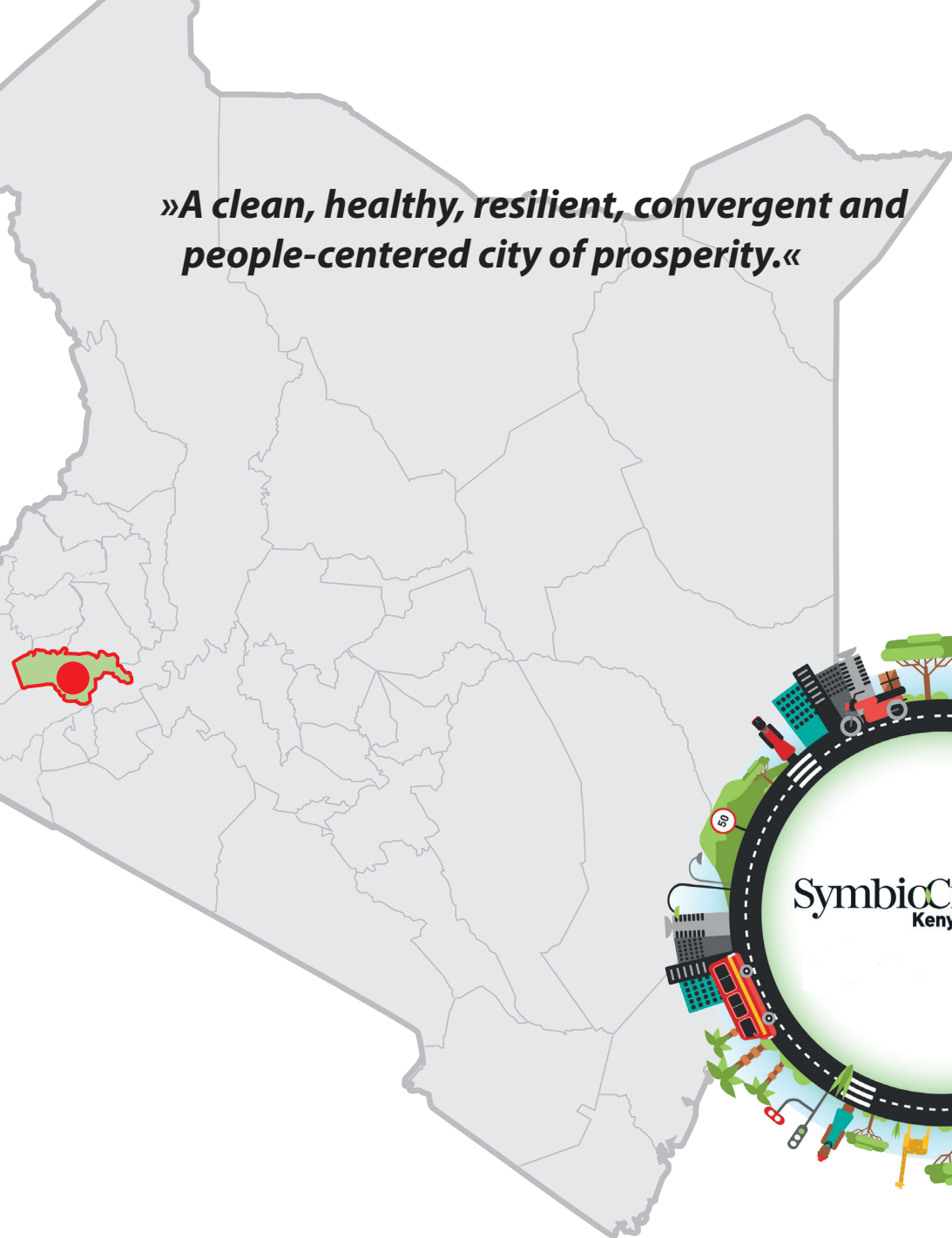


**»A clean, healthy, resilient, convergent and
people-centered city of prosperity.«**



URBAN SUSTAINABILITY REVIEW

AHERO KISUMU COUNTY



PREPARED BY:

The Technical Working Group
SymbioCity Approach to Sustainable Urban Development
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1. CHAPTER ONE

INTRODUCTION

This is not a project report in its traditional sense. It is a reflection of a process following a new approach to urban planning and development, and a summary of the results and activities so far. However, the journey towards a better Ahero Town – a clean, healthy, resilient and convergent city of prosperity – has just begun.



2. CHAPTER TWO

2. THE SYMBIOCITY APPROACH

2.1 SymbioCity as a concept

The SymbioCity approach originates from experiences and expertise of Swedish local governments to work with sustainable urban development. One of the primary objectives of the SymbioCity Approach is to promote an integrated and multidisciplinary planning approach to obtain sustainable urban development. By involving all important stakeholders from the early planning stages and focusing on possible synergies between different urban subsystems or fields of action, the process will more likely lead to sustainable solutions, enhanced urban development and more efficient use of natural resources, ultimately contributing to poverty alleviation.



Through the SymbioCity framework, there is a basis for dialogue that cuts across departments and offices and across sectors and into the targeted area where the stakeholders can contribute from the very beginning of the process. The idea of sustainable urban development keeps in its center the major needs – health, comfort, safety and life quality – surrounded by the sustainability criteria based on environmental, socio-cultural and economic factors. This is further guided by urban systems, institutional factors and spatial dimensions.

The SymbioCity approach can be done in six (6) steps:

1. Organizing the process
2. Diagnosis of the current situation
3. Identification of key issues and objectives
4. Develop alternative proposals
5. Analyse potential impacts
6. Choose strategy for implementation and follow-up

This Urban Sustainability Review (USR) report covers step 1-3 and touches on step 4. The USR is now summarizing the process so far and providing guidance on the way forward.

2.2 SymbioCity in Kenya

Since 2016, the Swedish Association of Local Authorities and Regions (SALAR) and the Kenyan Council of Governors (CoG) have been running a multi-year program focused on sustainable urban development in Kenya through the SymbioCity Approach. The Kenya SymbioCity Program builds the capacity of urban development stakeholders to guide Kenyan urban development in a more sustainable direction. The program is implemented as a joint partnership between SALAR and CoG. SALAR delivers the program through its subsidiary, SKL International. A Secretariat, established within CoG, is the core body of the program and comprises project management and technical staff from CoG and SKL International.

The CoG consists of governors of Kenya's 47 counties. In the context of this program, CoG plays an active role of coordination with the national government and the local authorities, stimulating dialogue, co-operation and mutual learning between the counties. The overall objective of the programme is to ensure that the relevant actors have the capacity and ability to take a leading role in sustainable urban development in Kenya.

The collaboration consists of four components:

1. Institutional development of CoG, with a focus on urban issues, but also the organization's general role as a representative organ for issues at the county level.
2. Urban development projects in seven pilot counties, based on the SymbioCity Approach and with an investment fund for implementation of innovative solutions.
3. Networking with and learning from other urban initiatives in the country.
4. Dissemination of pilot experiences to other counties, networking with Swedish municipalities and opportunities for private actors to take advantage of lessons learned from the pilots.

In Kenya, 18 counties sent their application to join the program and seven counties were selected for piloting - Kitui, Meru, Nakuru, Kakamega, Trans Nzoia, Kisumu and Homa Bay. The counties were selected based on their potential to bring about transformation in accordance with the SymbioCity approach.

Kisumu County has selected Ahero as their pilot town because of several reasons:

- Ahero is a vibrant trade hub, second to Kisumu city in revenue collected, and a gateway to Kisumu
- Ahero will continue to expand and may ease pressure on Kisumu as a satellite town
- Its residents are proactive and organized and willing to engage in the program, a crucial precondition
- There is great potential in the partly untapped resource in Nyando River, that could spur other economic activities related to transport, trade or tourism-
- Urban development is currently uncontrolled without any spatial plan and with great challenges in terms of pollution from liquid and solid waste, poor drainage and floods, and urban sprawl into public land along the river and the highway.

2.3 SymbioCity in Ahero

The concept of the SymbioCity approach has been translated into a mission for Ahero:

- To promote, facilitate and coordinate activities of different actors towards sustainable development and poverty eradication in Ahero Town.

The overarching objectives for Ahero have been to:

- Together with the community formulate strategies for improvement of Town, including all dimensions for integrated sustainable development
- Foster synergies and sector based networking amongst county line ministries, local communities, other civil society and nongovernmental organizations
- Nurture and promote development of formal/informal developments in an orderly and sustainable manner
- Inculcate and support multidisciplinary cooperation among stakeholders in Ahero
- Contribute to capacity building in Ahero by mutual sharing of knowledge and experience

3. CHAPTER THREE

3. ORGANIZING THE PROCESS

3.1 Organization

The SymbioCity program in Kisumu County is run through a special setup with the unique advantage of involving different departments and all kinds of stakeholders in the same organization.

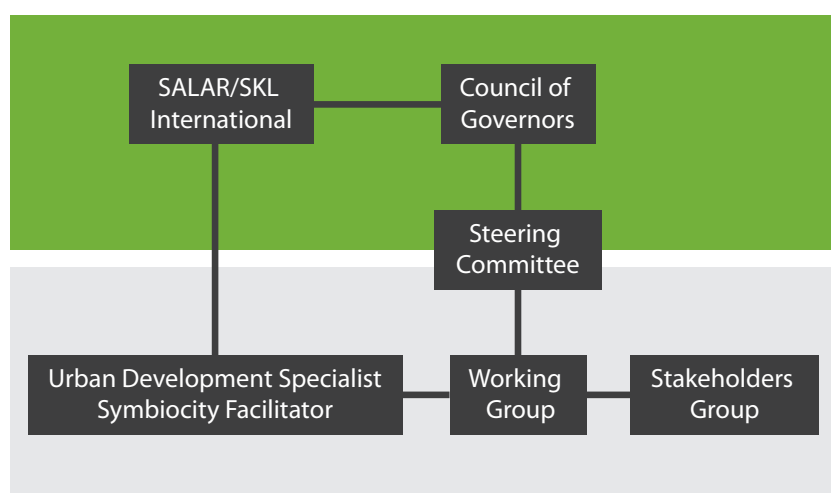
The **Steering Committee** of the SymbioCity program in Kisumu is headed by the Governor of Kisumu County and includes the CEC:s and Chief Officers of eight (8) departments plus the County Secretary and a member of the County Assembly Ahero Ward. The Steering Committee makes decision on all strategic issues, such as approval of quick wins, the change project and the USR.

The SymbioCity **Working Group** consists of 18 members plus the SymbioCity Facilitator and the Urban Development Specialist. The Pilot Coordinator is a Physical Planner at the Department of Lands, Housing and Physical Planning and the Assistant PC is Deputy Director of the Ministry of Environment. The Working Group members work actively with the SymbioCity program, meet once or twice weekly and report and coordinate with their respective departments and home offices. They are responsible for running the SymbioCity program in Ahero, to produce this USR and to develop and implement projects within the program.

The **Stakeholders** are included through continuous dialogue on site in Ahero, administrated through the Ahero Ward office, in meetings at their respective headquarters and assembled in workshops at certain occasions, e.g. Cleanup Days and USR validation. The Stakeholders provide input to the USR, share knowledge and ideas on urban improvements, validate proposed solutions and share with their networks.

See appendices for full lists of members of the Working Group, the Stakeholders' Group and the Steering Committee.

Figure 1: Organizational Chart



The communication between so many different players requires special attention, and this has been structured through a Communication Plan.

3.2 Work methodology

The SymbioCity Process in Kisumu County and Ahero Town has included a number of activities and methods for fact-finding and analysis of the situation but also for information dissemination about SymbioCity and involvement of stakeholders.



Working Group meetings



Stakeholders' meetings



Site Visits



Hot Spot Mapping



Fact-Finding Documents, Maps & Strategies



Interviews with Departments



Clean Up Days



Official Programs



Exhibition on recycling and composting



Partnerships with Women NGOs



Local Radio broadcasting



Theatre play on environmental awareness

The first Cleanup Day was arranged with around 300 volunteers, cleaning up the central parts of Ahero Town including the main roads and the market. A brochure is enclosed as an appendix. In the second Cleanup Day, focusing on the Nyando River aream in March 2017, focus was not only on waste-picking but actually removing the temporary dumpsite, greening the area through tree planting and setting up pit latrines.

Aside from this, there have also been communication and exchange of experience with other Pilot Counties and training through:

- Kick-off Workshop in Eldoret (September 2016)
- Integrated Proposal Development Workshop in Diani, Mombasa (March 2017)
- Working Group Workshop in Nakuru and Naivasha (June 2017).

4. CHAPTER FOUR DIAGNOSIS OF CURRENT SITUATION



Figure 2. Aerial view of Ahero Town with Nyando River running through

4.1 Urban planning and governance

Ahero is a town located 25 kilometers south east of the county capital, Kisumu. It is part of Nyando District of Nyanza Province, Nyando one of the seven subcounties in Kisumu. Ahero comprises of Kakola Ahero, Tura, South Kochogo, Kakola Ombaka, Kochogo Central, and Kochogo North Sub-Locations. The town is segmented into 4 quadrants, dissected by the highway East to West and by Nyando River North to south, and this creates one of the major structural elements that shape this town.

Ahero hosts an urban population of 7,891 and a total population of 61,556 (2009 census) and will be defined a municipality when it reaches 70,000.

The county government has distributed its functions into 10 sectors otherwise referred to as ministries, and each headed by a Chief Executive County Member (CECM), commonly known as waziri or Minister. The ministries are:

1. Finance and Planning
2. Water, Environment and Natural Resources
3. Lands, Housing, Physical Planning and Urban Development
4. Health Services

5. Education, Youth, Culture & Social Services
6. Agriculture, Fisheries and Livestock Development
7. Roads, Transport and Public Works
8. Communication, Information and Technology
9. Tourism, Trade and Heritage
10. Industrialization, Energy and Enterprise Development
11. Green Energy and Climate Change

Two major roads meet at Ahero, the B3 road from Nakuru to Kisumu and A1 road from the Tanzanian border via Kisii; these roads are both international trunks.

Thus, Ahero is a strategic transport node with heavy traffic passing through and all kinds of trade and activity concentrated along the highway. There is no designated parking space for the cyclist, and handcarts and matatus are dangerously parking on road reserves. Roads to the settlements are not properly defined and not graded. Thus, bodaboda remains the main mode of transport within the town.

The main local industry is agriculture, including rice fields. The town is surrounded by informal settlements on freehold titles. The sprouting of industries along Nairobi road to the north of Ahero gives it new impetus. The town suffers from narrow, neglected non-motorable roads that are poorly drained and with non-functional street lights.

It is estimated that 63.7% of the population falls below the poverty line and that the dependency ratio is very high, 100:99.

The town is surrounded with two secondary schools, three primary schools and vocational training center and several ecads. Internet penetration is 3% though majority gets a boost from WAP enabled phones, few cyber cafes and internet facilities exist in the area.

The Nyando River flows through central Ahero and helps irrigate its many rice fields. The river is not utilized for any water-based transport, and it is eroded and polluted by liquid and solid waste.

The physical planning department in 1997 developed a structure plan in its attempt to improve the town. However, very little effort was put in place to secure the land as recommended on the plan, formulation of a zoning policy and land management system are lacking as in most counties. Thus, there is basically no urban plan to guide the current activities or prepare for the increasing population and urbanization. This poses great challenge to the growth the town.as many facilities which needs to support the town are not in place. The lack of spatial framework has led to intensive and uneconomical land subdivisions and haphazard development.

Physical planning and housing is now domiciling in the Department of Lands, Physical Planning and Housing, which draws its mandate from the Urban Areas and Cities Act. The town does not have a planning unit, therefore most of its approval are done at the County Headquarters.

To some extent there has been public participation before inception of projects as well as in approval of annual budget, however level of engagement is wanting because of the workshop designed consultations where only few can attend. Views and opinion of the disadvantaged and working groups are not incorporated.

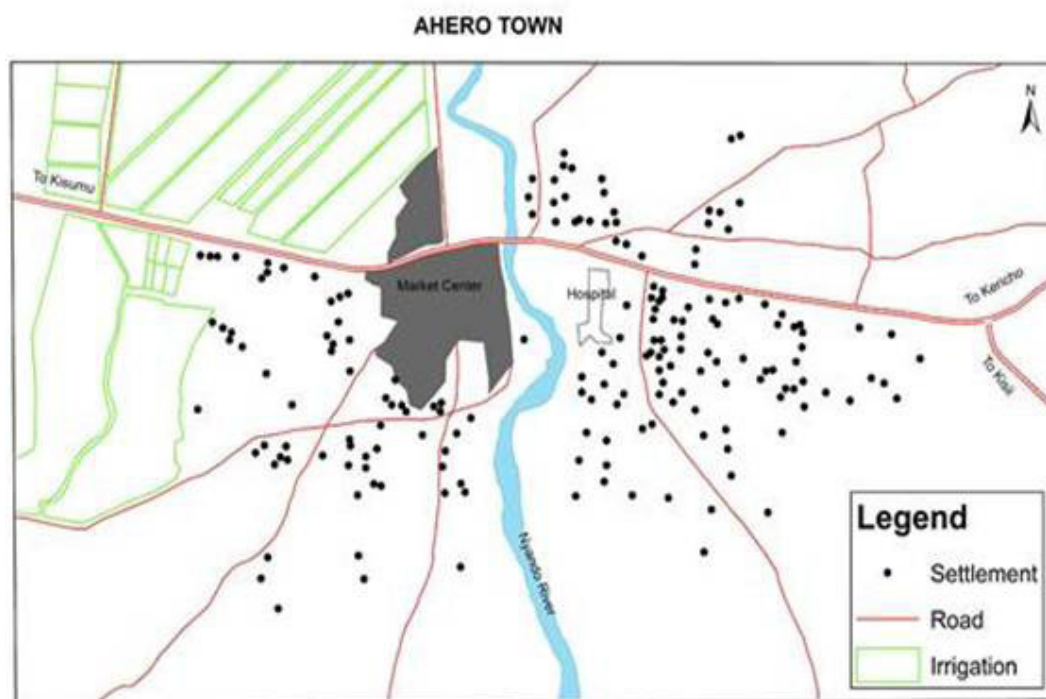


Figure 3. Map over Ahero Town with settlements, roads and irrigated areas

4.2 Housing

Ahero is experiencing tremendous growth in new housing structures as well as change in the type of houses and the building materials used. It receives about 16 developments in a month with many structures not being submitted for approvals. Most houses within Ahero are temporary, constructed with materials such as clay, iron sheets and wood, but this has changed with most houses now coming up constructed with cement, sand, stone, steel, concrete and fired bricks.

Two Bedroomed Self Contained	One Bedroomed Self Contained	Single Room			
		Permanent	Mabati Walled	Mud Walled	Mud Wall Plastered Wall And Floor
Kshs. 5,000	Kshs. 2,500	Kshs. 2,000	Kshs. 1,500	Kshs. 1,000	Kshs. 1,500

Figure 4. Residential Rent Prices

The town has also experienced conversion of land use from Agricultural to residential, Institutional as well as commercial and petrol stations. Most people settle on agricultural land due to culture (“goyo dala”), the establishing of home when one gets married). This is also contributed to poverty as some natives prefer selling their land and settling in other places reserved for agricultural purpose in addition causing an increase in land fragmentation.

The people of Ahero have parcel numbers and not title deeds, the process is still under adjudication. The urban area still has not been surveyed and the lack of proper zoning and clear land ownership leads to land conflicts.



Figure 5. A typical home stead within Ahero town and and a typical Semi permanent house (mudwalled)

4.3 Urban transport and roads

Ahero town is situated along Kisumu -Nairobi highway and approximately 17 km from Kisumu town. It borders smaller urban centers like Katito in Nyakach subcounty and Awasi in Nyando Sub-county which are of close proximity.

Kisumu-Nairobi highway is a major road that has been improved in the last 3 years by the national government, initially it was smaller in size and dilapidated.

There is also A1 road that serves the populace stretching from Ahero Girls-Ombeyi to Miwani at the foot of Nandi Hills in Nandi County.

The town also enjoys a rich network of feeder roads within and around the market center which are motorable making it easy to access the remote areas. The feeder roads are murramed and range between 6-9 meters width.

The interior of the commercial center is well networked with a tarmac ring road connecting with the Kisumu -Nairobi road.

The mode of transport within Ahero is predominantly by motorbike, also known as boda boda which is preferred by the majority because it is efficient, affordable and easily accesses the remotest areas.

There are also a few bicycles used to ferry passengers on short distances at KSh 20-30, as well as tuk-tuks.

Within the commercial hub, there are a number of 3 ton canteres and 10 ton tipper trucks used for ferrying and transporting building materials and produce from farms.

For passenger services, the minibus Nissan 14 seater is widely used connecting to Kisumu, Muhoroni and Homabay among other places.

Big buses, 72 seaters, are available for drop-and-pick while en-route to other destinations, they are not commonly used within unless when traveling long distance.

Thus, there is good availability of transport and passenger services in Ahero, but a number of challenges and issues connected to transportation.

- **Heavy traffic:** Cases of accident are recorded daily either through motorbike accidents and casualties from the moving engines. Heavy vehicles, e.g. big trucks overloaded with sugarcane pass continuously. If there were railroads available, much of these transports could be avoided.
- **No bus park:** Because of poor spatial planning, there is no designated bus park in Ahero Town. All motorists park along the busy Nairobi-Kisumu highway causing a lot of obstruction and accidents from time to time. Waiting bays for passengers are very few and cannot meet the population, they are shared by both boda boda and commuters.
- **Dangerous for pedestrians:** There are no designated foot paths, pedestrian crossings or foot bridges within the busy commercial center which adds to the traffic and logistical challenges in the urban center.
- **Non-regulated traffic:** There are only two speed bumps in total, located at the entrance and exit, and there is hardly any presence of National Transport and Safety officers who should monitor speeding above 30-50 km/h. There is also not adequate road signage.
- **Encroached road:** Small businesses, e.g. the juakali sector have gradually moved closer to the road, encroaching the public land and area demarcated along the road to have no permanent structures or such activity for logistical and safety reasons. Monitoring and fining of these businesses is lacking as well as solutions to bring the passing clients closer to the market without having to stop in the middle of the road.



Figure 6. The road to Kisumu is crowded with heavy vehicles, boda bodas and pedestrians without bus stops

4.4 Natural resources, water and forest

The most important condition for local economic development in Ahero is the fertile soil and access to water through Nyando River, although underutilized. There is no forest and the central parts of town have in fact very little green space and few trees, stated to have been cut down for production of charcoal. This makes the town dusty and hot while more trees could have provided shade and cleaned the air to some extent. With more vegetation in general, the risk of flooding of the streets could also be mitigated by better absorption in the ground.

The green space along Nyando River has a large potential to become that larger patch of vital urban green space provided that the practise of disposing of waste and using it for defecation is interrupted. The free roaming of cattle in the area causes major erosion to the riverbanks and should be controlled.

4.5 Local economic development and trade

It is primarily agriculture in rice farming that is the most viable economic backbone of Ahero, however the residents have also ventured into tomatoes and watermelon farming to subsidize the same, milk from Nandi county, second hand clothes popularly known as “mitumba” and livestock trading also plays a major role as economic stimulus.

The community also ventures in the juakali (open market) trade sector.

There are very few employed people and small scale traders in the area. However, there exist centers where people sell and buy goods. Economic activities such as carpentry, commerce, small trading take place in these centers. Many kiosks, defined as smaller retail shop, are also operated. Other businesses such as restaurant, tailoring (both in shop and on veranda), shoe repair, hardware, bicycle repair, textile/cloth, metal work and barber shops are found in the area. Like other parts of County, Ahero is a net exporter of labour force to Kisumu county and other parts of the Great Lakes Region, as employment opportunities in the area become rare.

Livestock production is practiced in Ahero with Zebu Cattle being the main breed reared in the area. Small stock such as goats, sheep and poultry are also kept and some members of the Luo community practice fishing along Nyando River.

There is support for the informal and small business economy in Ahero through e.g.

- Sensitization, training and establishment of cooperative societies/development groups through the department of cooperatives and enterprise development.
- Enterprise development for the small scale farmers and business capacity building undertaken by both the department of enterprise development and trade.
- Registration and monitoring of SACCO:s that provide loans to the small scale traders. Currently, the number of SACCO’S providing financial services stand at ten within the Ahero. There are also three two major Juakali Associations in Ahero.

Regarding availability of financial support for business through County Government budgets specifically for Ahero, the Department of Commerce is offering loans to the business community, and provision of a conducive business environment.

Table banking, loans from the Joint Loans Board managed by the County Government and Micro Finance Cooperations plays major roles in financing.

Development of infrastructure (market shades and toilets) and continuous cleanliness of markets is handled by the Department of Trade.

Currently, there are two major developments in terms of loans provision by the County Government of Kisumu –

- Enterprise Development Fund offered by the Department of Industrialization and Enterprises Development and;
- Kisumu County Trade Fund offered by the Department of Trade.

The major challenge is that the central market is overcrowded and expands gradually and in a non-regulated way into the roads, blocking traffic and creating hazards. It also lacks some infrastructure to ensure product quality and safety, e.g. proper stalls and sufficient sanitary facilities.



Figure 7. Table-banking in a women's cooperative and Ahero central market

4.6 Agriculture

Ahero is an agricultural town with an area of approximately 3,880 hectares of which the area available for crop growing is about 2,000 hectares. The area under irrigation managed by Ahero Irrigation Board is 1,077.7 ha.

Agriculture is the economic backbone of Ahero. It employs about 70% of the population and the number of households/beneficiaries at Ahero Irrigation Board is approximately 15,000. The majority of people are moving from rural areas to urban area in Ahero to search for employment in the irrigation schemes.

The types of crop/produces in Ahero are:

- Rice
- Tomatoes
- Kales
- Watermelon
- Black night shades
- Cow peas
- Butternuts onions
- Capsicum
- Maize
- Cassava
- Millet
- Cotton
- Fruits-local mangoes and citrus
- Sugarcane

Some crops are grown primarily for subsistence: maize, millet, beans, green grams and sorghum. As weather patterns become unpredictable, Ahero farmers are turning to other crops during dry season to have a more reliable income. Beans and green grams are intercropped with maize and sorghum while the others are grown for commercial use.

- Rice
- Tomatoes
- Kales
- Watermelon
- Black night shades
- Cow peas
- Butternuts onions

- Capsicum
- Pawpaw

The above mentioned crops are grown under irrigation using Nyando, Nyatini and Ngadi where most of the youths use water pump to irrigate their farms. This has created self-employment to the youths directly and indirectly.



Figure 8. Rice harvesting and selling of rice outside the rice mill in central Ahero

Rice irrigation takes about 200 hectares and the farmers are planting other crops after rice production under irrigation. Unprocessed rice (paddy) is being sold to customers as far from Uganda and other parts of the country. Delayed payments by co-operatives and millers and invasion of middlemen from neighboring counties and countries who buy paddy at low price are the main reasons the farmers have turned to growing other crops as returns from rice decline.

Ahero town has privately owned rice mills and one owned by the government where value addition is done.

There should be a warehouse for common storage of rice, incl. milling, storage and wholesale (at reasonable prices) at the same location. NIB (national irrigation board), resources unevenly distributed.

Buyers come directly from the farmers at very low prices, fast cash, to save the farmers from the hassle of bringing the goods to the market, but the farmers get less for the goods through this system with middlemen.

Another loss is the non-utilization of agricultural residues, rice husks, wood chips, straw etc. Currently, these wastes are discarded or burned by most farmers, although it could instead be used for:

- Animal feed (to dairy cattle and chicken)
- Building materials, boards
- Briquettes for fuel

At the Ahero Irrigation Board, these byproducts are processed and packaged to be sold to supermarkets within the county and beyond.

Agriculture in Ahero is vital for employment creation, food security and improved living standards. The challenges are:

- High cost of electricity /fuels to run pumps

- High firm input prices e.G. Fertilizer
- Competition from rice imports
- Weak farmer organizations
- River bank erosions, loss of land and damage to infrastructure.

4.7 Energy

A large proportion of electricity on the Kenyan grid is generated from renewable resources, e.g. solar, hydro and biofuel. Of interest to Ahero is sunlight, biomass, biogas, hydro.

Kisumu County is well served as regards energy infrastructure.

The two electric power generating stations located in the county are the Sondu and Sangoro, both hydroelectric. The main interconnection with the national grid starts from Lessos where the 132 KV line comes to Muhoroni to interconnect with the gas turbine and thereafter to a substation in Mamboleo near Kisumu city. The 132 KV line from Sondu also interconnects at Muhoroni.

The main transmission lines serving Kisumu county are currently inadequate and thus the need for the gas turbine to provide voltage support. This situation is expected to change when new transmission projects come on stream.

Kisumu is also an important point on the national pipeline for petroleum goods operated by Kenya pipeline Company (KPC). The KPC depot is near Kisumu International airport. Linking Kisumu to the pipeline network are 2 off 121 KM lines 3 & 6 (diameters 6 and 10 inch respectively). At the depot, the fuel is kept in tanks and can be loaded onto trucks for distribution to petroleum retailers in the county, neighbouring counties and some to the neighbouring countries of Uganda and beyond.

Energy is a critical enabler. Every advanced economy has required secure access to modern sources of energy to underpin its development and growing prosperity. In developing countries, access to affordable and reliable energy services is fundamental to reducing poverty and improving health, increasing productivity, enhancing competitiveness and promoting economic growth. This is because it is essential for the provision of clean water, sanitation and healthcare, and provides great benefits to development through the provision of reliable and efficient lighting, heating, cooking, mechanical power, and transport and telecommunication services.

By improved access to energy we mean

- Availability of modern forms of energy
- The ease of use of existing forms of energy
- Efficient and safe use of all forms of energy.

Improved access to energy will enhance the life of all residents in Ahero in countless ways. It will reduce poverty by raising the town's productivity and extending the quality and range of its products – thereby putting more wages into the pockets of the residents.

There's a close correlation between income levels and access to modern energy. The traditional approach used, wait for incomes to rise first before improving access to modern energy. Basically waiting for well to do residents to demand access to modern energy.

However there's now evidence that even in low income areas, modern energy services can be taken and the residents encouraged to adopt them. An example is the last mile project by Kenya Power which intends to take power to as near to residents as possible and subsidize

connection rather than waiting for a resident say 1KM away from the power line to apply and be given a large connection fee which then discourages the resident.

Biomass and its various forms will remain the most significant fuel for cooking and thus an improvement in the efficiency of using biomass and the use of other forms of biomass will improve the availability of this fuel and will help stave off pressures on its pricing.

A significant number of premature deaths can be attributed to household air pollution resulting from the traditional use of biomass solid fuels, such as firewood and charcoal. Modern cook-stoves are designed to be more efficient, pollute less and be safer alternatives to traditional cook stoves.

Fossil fuels will play an increasing role due to their ease of use and improving economic circumstances of households.

Use of gas for cooking is very low, biogas almost non-existing. There has been a green energy program to promote use of gas instead of charcoal and firewood. This is also to reduce the tree cutting/deforestation in the Ahero Town.

Households

Electricity provides the best and most efficient form of lighting, extending the day and providing extra hours to study or work. Household appliances can also be powered by electricity, opening up new possibilities for communication, entertainment, food preservation and comfort.

Within the households and small scale farms, electricity can also make it easier to pump water for domestic use, animals and crops.

Electricity to the household can be either from the grid, from a mini-grid or from solar home systems of varying complexity to meet a homes need within their budget constraints. Modern cook-stoves are efficient and use less fuel wood or charcoal thus improving the economics of their use. They also reduce significantly the daily exposure of households (particularly women and children) to noxious cooking fumes – helping to avoid premature deaths caused by indoor air pollution.

Institutions

Almost all schools and health centers, whether public or private, in Ahero have access to electricity from the grid. It is now possible for the county government of Kisumu to insist that all new institutions being set up be on electricity either from the grid, a mini-grid or a solar power system.

Of most importance in all institutions is that electricity must be available. The benefits deriving from having health centers with electric power are:

- Lighting - enables operating hours to be extended. For schools this could mean preps can be done in the evenings.
- Refrigeration – Vaccines and Medicines can be kept under ideal conditions in health centers. Perishable foods where kept can be kept preserved.
- Automation and office equipment – Records can be computerised and kept properly.
- Entertainment and communication - In health centers doctors can seek assistance from senior doctors elsewhere via modern communication gadgets. In schools radio lessons can be undertaken.

- In health centres, medical equipment and supplies can be sterilised easily.
- Other uses, e.g. water pumping can easily be powered.

Most institutions that cook use firewood as the main fuel, although a good number have improved cook-stoves.

Commercial Business

Commercial businesses typically are set up to respond to a market (the need) and access to energy is crucial for setting up and sustaining a business. As an example welding workshops are often set up where there's access to electricity and people living in non-serviced areas need to bring their goods to the welder in the nearest centre, or be charged extra if the welder has his own generator.

Thus availing modern energy services in all population centres will make it attractive for businesses to set up and thus increase economic activity.

Promoting modern energy services via such incentives as subsidies and regulation will also bring in new businesses that provide those energy services. An example is cook-stoves. If these are well promoted, they could be built and maintained locally thus increasing economic activities.

Some commercial businesses e.g. commercial buildings, malls and petrol station have space (car parks and roof tops) that can be used to generate clean energy, e.g. using solar PV technology. Such energy could be consumed as it is generated (via the grid).

As currently set up the grid in Kenya does not allow “wheeling”, where a consumer with integrated renewable energy generation can export to the grid and net off from his consumption. Before wheeling is allowed commercial businesses generating grid tied solar PV can have their equipment limit the generation to their instantaneous consumption. As an example petrol stations have clear roofs that would be suitable for rooftop Solar PV and dispense most of their fuel during the day when the solar PV energy is available.

All forms of renewable energy can be converted to electricity and thus the presence of the renewable energy resource and the economics of the conversion process are the major factors when considering a renewable energy electricity project.

4.8 Water supply

Global context

United Nations Millennium project has goals, which targets the year 2015, when nearly 60% of the world's population are expected to make cities their home. Therefore meeting the rapidly growing urban demand for housing and safe water is and will be a daunting challenge (UN Habitat, 2003). Developing countries and Kenya in particular is facing acute housing and safe water provision in urban areas. Many of the urban towns fall short of providing the services because local governments are not efficient enough to fulfill their mandate.

According to UNICEF (2008), over 1.1 billion people lack access to an improved water source and over three million people, mostly children, die annually from water-related diseases. Water quality refers to the basic and physical characteristics of water that determines its suitability for life or for human uses. The quality of water has tremendous effects on human health both in the short term and in the long term. As indicated in this report, slightly over

half of Kenya's population has access to improved sources of water. (2013 Kenya National Bureau of Statistics (KNBS) and Society for International Development (SID))

Legal framework

In the constitution of Kenya 2010, the fourth schedule on the distribution of functions between the national and county government devolved water and sanitation services to the counties.

According to the Water Act 2016, every water resource is vested in and held by the national government in trust for the people of Kenya.

Lake Victoria Water Services Board established under this act is mandated to regulate and manage water distribution while Lake Victoria Water Resource Management Authority regulates the management and use of water resources.

A county government shall subject to sections 70(l) (a) and (b), 117 and 120 of the County Government Act, 2012(a) give effect to national water services standards and conditions set by the Regulatory Board for purposes of ensuring consumer protection; and (b) take into consideration the requirement relating to tariffs gazetted by the Regulatory Board while imposing tariff.

Current situation in Ahero

In Ahero, the most relied on water sources are borehole, shallow wells, river and ponds. The town has low coverage of piped water with main distributors being Kisumu Water and Sewage Company, Ahero Catholic Church, Ojinko secondary school and Karanda Secondary School, all this being supplied from boreholes. Approximately 300 households have water piped into their homes and others have water piped to a standpipe nearby, while the larger population rely on river, wells and handcart distributors (Water vendors). These sources of water compromises on the quality of water used in homes and as a result pose health issues.

Many health problems are linked to water, its quality, the quantity available and the ease with which it can be obtained and the provisions made for its removal once used. Many people within Ahero usually have no alternative but to use contaminated water or at least water whose quality is not guaranteed.

Water - washed diseases are associated with a lack of water supplies for washing and include various skin and eye infections such as scabies and trachoma (from which millions become blind). Most water borne diseases are also waterwashed as their incidence is associated with inadequate water supplies and contaminated.

The most significant water-based diseases are bilharzias (schistosomiasis) and guinea worm. Although guinea worm is a rural based but it has occurred in epidemic form in small urban centres when piped water.

The river is also used for irrigation purposes. Ahero Irrigation Scheme was started as a pilot project to explore the feasibility of irrigation in the Kano Plains in 1966 and started operation in 1969. The irrigation is dependent on Nyando River water.

Adequate Provision

Everyone has access to water in some form since no one can live without water. The issue is not whether they have access to water but whether the supplies are safe, sufficient for their needs, regular (for example is water available 24 hours a day and throughout the year) convenient (for instance is the water piped to their homes or close by) and available at a price that they can afford.

The quantity of water available to a household and the price can be as important to a family's health as its quality (Cairn, 1990). Where there is a public supply through a well or public standpipe the quantity used per person will depend on the time and energy needed to collect and carry water back to the home. Water is very heavy to carry so the distance that it has to be carried influences consumption level. It is apparent that the majority of households carry water for one kilometer, this is quite far therefore less of water will be used a situation that justifies the fact that water supply is inadequate in Ahero Town. The piped borehole water, wells and river water, which are the sources of water in Ahero, are not treated and so the quality of water consumed by the residents cannot be relied upon. This situation puts the health of the residents at risk for contracting diseases.



Figure 9. A water vendor (l) and residents using Nyando River for various purposes.

4.9 Solid waste management

Solid waste management is a big challenge in Ahero Town, and it affects and involves the whole community. The town lacks a formal waste management system, which affects even its peri-urban areas. The ever-increasing numbers of people that settle in the town every year produce such waste whose disposal is poor. Thus, with further development and expansion in form of unplanned built up areas and industrial sites, waste accumulation and disposal problems in Ahero town is set to increase.

Based on the town population of approximately 10,000 people generating 0.5 kg/person and day, the household waste generation is estimated to be about 5 tons per day. The major part is organic (biodegradable) waste, e.g. food waste (70%) while the rest is plastics, paper, glass, textiles, hazardous waste etc. E-waste is constantly increasing and already amounts to 8% of the municipal waste.

The streets are swept daily by revenue collectors who double as sweepers thereby not doing it effectively. There are no permanent staff who sweep the town and carry out environmental activities, and onsite waste collection is estimated to be as low as 5%. This has led to deteriorating cleanliness of the town.

After collection, most of the waste is brought to the collection point at the entrance to Ahero, coming from Kisumu. Waste is then collected occasionally, e.g weekly or fortnightly, by the county trucks and transferred to the open dumpsite in Kisumu.

No refuse truck is designated for Ahero town, except the one from Kisumu which goes round in the whole county.

Because of the unreliable services, the community around resort to burning waste, burying and disposal in water resources and drainages.

There are no recycling initiatives, no composting or reuse of wastes, except individuals refilling bottles for fuel or selling used clothes, books etc.

There are currently no litter bins in the streets, no material recovery facilities or designated transfer points. However, the county through the Department of Environment has set aside a budget for litter bin installation, refuse chamber and sensitization of the populace on best practices.

There is regulatory framework in place, e.g. the Kisumu Solid waste Management Act 2014 and the Kisumu Solid waste management strategy. EMCA 2015. However, there is basically no monitoring or enforcement in place.

The county has through its Department of Environment done a lot in terms of capacity building through seminars, workshops and short trainings on solid waste management. However, the general level of awareness both regarding hazards to health and environment when burying and burning the waste as well as the potential value in waste for recycling must be considered to be relatively low.

Based on the development in Kisumu City and programs on segregation at source, recycling and composting, there is a large potential for peer-to-peer learning and also room for public private partnerships in solid waste management within the county.



Figure 10. Waste is dumped and burned in the streets of Ahero

4.10 Drainage and sewerage

The water ways are maintained annually through the county government and some members of the community erect trenches and dykes to control floods (see more under Flood Management). In Ahero town, drainage network and maintenance is a county service provided by the Department of Physical Planning, although continuous drainage maintenance and construction is insufficient.

All kinds of waste are thrown into the ditches and drainage canals, especially around the market and along the roads, causing blockages and non-functioning drainage.

There is no sewer system in Ahero, Kisumu Water Services Company is mandated to provide sewer services but still the town has not been reached by the services. Consequently, many households have septic tanks, which are to be exhausted by private companies at a fee on a schedule. Pit latrines are also used, some are emptied, but some are allowed to seep into the soil or nearby water. Some share sock pits for approximately 20 households. Leakage of raw sewage into the soil and nearby waters causes environmental pollution, e.g. fertilization and lack of oxygen (fish death) and health risks.

The private companies collecting the liquid waste/sludge originate from Kisumu and return there to empty the waste into open lagoons in Kisumu without any kind of treatment.

Raw sewer is one major source of point water pollution which contaminates both the underground water as well as the river. This has resulted in spreading of waterborne diseases and related illnesses to the community who depends on the water as a resource for domestic uses (see more under Public Health).

There is legislation in place, e.g. the Public Health Act and the Water Act 2015, to regulate these issues, however monitoring and enforcement is lacking. However, the county government has plans to extend sewer services upon negotiation with the KIWASCO.



Figure 11 Blocked drainage (l). Pit latrines located along Nyando River (r).

4.11 Flood management

Floods are a general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters from the unusual and rapid accumulation or runoff of surface waters from any source.

Kisumu County where Ahero town lies has a tropical climate and floods are very common during the annual rainy seasons in the county which are usually between the months of April to June and then again between November to December. Ahero town is situated at the foot of the Nandi escapement with a flat topography gently sloping towards the Lake Victoria. During rains, surface run-off and storm water flow from the Nandi hills through water channels, streams and Nyando River and in many occasions the river overflows its banks flooding the adjacent lands.

Floods have a devastating effect on socio-economic activity in Ahero Town. During flooding, many families in Ahero are displaced by the continuous heavy downpour of rainfall going into Nyando River and then bursting its banks, leading to the overflow of drainage and or surface water channels spilling water to the floodplains around it. The main challenge faced every year is that although residents in flood-prone areas are well aware of the flooding risk, they stay in the lots that have been passed on from generation to generation since there is no alternative.

There are also families that have expanded their lot into the riparian area along Nyando River, despite the fact that this is public land and there can be no structures close to the river. This practise also causes increased pollution of the river including plastics and other material thrown from the nearby houses, and this adds to the flooding issue by blocking the flow of water.

Also the market area, which is congested and with poor drainage system, is hit during flooding making it difficult or impossible to uphold the economic activity on which many families depend.

When flooding occurs, various partners such as the National Government, County Government, Kenya Red Cross, World Vision and others join hands in evacuation and relief services such as the provision of water and sanitation, health, food and nutrition, security, education and other myriad services during the operation.

The County Government of Kisumu has put in place measures to combat the devastating effects of floods. The County government through the department of special programs also does flood control through dyking, desilting and opening of new water channels. The government has built gabions and desilted several rivers with the aim of opening up waterways in flood prone areas thereby greatly reducing the effects of floods in Ahero leading to lesser flood waves in the area making the residents appreciate the interventions being done so far. There is also a national government flood control program called “Food for work” where community are encouraged to participate in digging trenches and are paid.



Figure 12. River Nyando is heavily eroded and floods regularly. The market is flooded during heavy rains.

4.12 Public health

The general environment in Ahero is heavily affected by the lack of waste collection and functioning stormwater drainage as well as lack of toilets and sanitary facilities and collection and treatment of sewage.

The commercial centre in Ahero is dominated by litter both on the surface and drainages generated by the businesses and open air traders. There are 318 business premises, but also non-regulated businesses especially along the main road.

The **drainage system is blocked** by different kinds of wastes from plastics to human waste, attracting flies, rodents and other animals. The stagnant water causes breeding of insects that can be vectors of diseases, bacteria growth and smell.

Around 22.1% of the registered cases are related to waterborne diseases. A number of diseases have been reported due to poor sanitation e.g. diarrhoea, bilharzia, typhoid and brucellosis being most prevalent during rainy seasons.

During dry season, the populace suffers from flu, common cold, eye infection and skin infections. Some of this may be caused or worsened by air pollution such as dust from passing traffic, use of charcoal and the emissions from burning waste in the streets in lack of waste collection services.

The riparian areas along River Nyando and other water bodies have been encroached by residents who discard both liquid and solid wastes into the surface waters. The river is also used for bathing, for washing clothes and dishes. Several times daily, hundreds of cattle walk across the river to the other side for grazing. Thus, the river is heavily polluted.

There are also issues connected to poor hygiene in food handling. The town has a total of 235 food handlers registered by the public health department and only 120 persons are examined and certified to handle foods. Consumable foods are not handled in hygienic standards both at the road side hotels and open air market due to poor sanitation within the points of business and dirty environment, and this has increased food contamination and poisoning.

Because of Ahero's location and as a hub of business in the region, it has attracted a bigger population with consequences of social issues e.g. prostitution which increase spreading of HIV/aids and other sexually transmitted infections (STD). HIV prevalence is currently 19.2%.

The ministry of health has trained and recruited a number of community health workers who have capacity built on public health related issues. Public awareness has been raised through local radios, chief barazas and through structured training on specific issues and legal notices.

Due to high population within the market, there is a lot of human and vehicular traffic leading to congestion consequently accidents from time to time.

There are two major health facilities which are not fully equipped to handle severe cases. There are a police station and government administration offices with administration police who work closely with the chiefs and sub-chiefs to oversee security. Crime rate is under control with minor offences only, few cases of gun use and burglary reported, the place is fairly secure.



Figure 13. Cows crossing the river, blocked drainage and burning waste

4.13 Socio-cultural development

The ministry that is in charge of social cultural development is Education, Youth, Culture and Social Services. Community activities in Ahero include both social and economic activities which play a major role in the development of the town.

Employment and community activity

As described above, the majority in Ahero work at farms or in cluster services, e.g. selling the goods at the market. The farms are taking turns in planting and harvesting, leading to continuous work opportunities. Some people come in from rural areas to work in rice farming in Ahero and rent a house during that period.

Younger people, though, shy away from the traditional and non-mechanized farming in Ahero and look for formal employment and white collar work.

Ahero town has a **community resource center** about 25km east of Kisumu town. The Resource Center serves as a One-Stop-Shop offering a variety of services to the local community. To connect with community members, the center holds different events such as a digital TV (DSTV) and a projector to show soccer matches in the evening and cartoons for children. Further sportive activities such as football games for the community are also planned as well as a gym. The intention is to empower the youth through the mentioned activities. The youth also interact with the contact persons and ask questions and seek advice on various issues in a well-protected frame. Providing the children and youth with such an environment protect them from bad external influence and support them on a positive path of life.

- Accessibility to recreation facilities is really wanting, this is because the resource centers are limited and cannot cater for all youths within the ward. There is also no stadium, social hall and park where people can relax within the town.
- Under social activities the youth engage in sports. There exists tournament among different football clubs for both male and female within Ahero ward. The tournament is usually sponsored by different personalities. This year's tournament was sponsored by the area Member of County Assembly and the teams that worn were awarded. There are also some gyms around the town which are not affordable especially for the poor.
- There are also churches, mosques and other religious centers around the town. Denominations that are dominant in the area include Catholics, Muslims, protestant and Holy Spirit filled churches. Most churches are within reach and some of them have been started in residential places.

- Restaurants and bars are everywhere within the town center, community members spend their time taking alcohol especially in the evening. Loud music becomes a nuisance everywhere especially during evening when the bars are functional.
- Ahero town has 10 active youth groups which engage in different activities like farming, poultry keeping and Savings and Loaning. They also organize themselves in women groups which do the same activities and already there are 5 active women groups and 2 CBOs of which one is for the disabled (Kochogo Disabled).

Culture and gender

Traditional ownership and inheritance patterns in Ahero continue to marginalize women and girls and prevent them from having access to, and gaining control of productive resources such as land. Gender analysis has shown that women who lack access to land also lack access to inputs such as credit (World Bank, 2000). In addition, the traditional division of labour overburdens women and blocks them from positions of power and influence. The girl child is disadvantaged in areas of education where preference is given to boys, in cases where parents are faced with a problem of choice between the two sexes. Even when they are left in school, the girls spend a lot of their time performing household chores like drawing water, fetching firewood and cooking, leaving them with very little time for studies.

Some gender roles are socio-culturally sensitive. For example grazing, fishing, hunting, harvesting of materials and medicinal herbs are considered the role of men and male youth while fetching of water and fuel wood is carried out mainly by women and female youth.

Traditional beliefs also influence the utilization of wetland resources. Rural communities believe that evil spirits live in the Nyando River so there is a time beyond which one must vacate the place. Normally, it is women who leave the river early compared to men. Men also believe their forefathers were buried in what are now wetlands so it belongs to them by lineage.

Some of the cultural values are attached to the use of resources around Nyando River. For instance, the plants such as Phragmites “Odundu” are used to stop hailstones from destroying the crops by putting the plants stuffed with some traditional medicines at the corner of every farms., the umbel of Cyprus papyrus, dipped in some traditional medicines and sprayed in the farms, is also believed to protect the crops from hailstones. Drinking the water from Nyando River directly is believed by the community to cure some diseases. It is believed that when the evil spirits are cast, they move and hide in the River. The traditional healers would direct their clients to bath in the River to get cleansed of certain diseases as the areas are considered as cleansers (Manyasi). This made the area around the River to be used by the community as areas they would go for cleansing. For instance, adulterous members of the community would bathe in a flowing stream after committing adultery to protect their children from dying as it is believed direct contact with the child after the act would lead to death of the child. Similarly, lactating mothers would also bathe in the River before suckling their children as it is believed suckling after a fight would kill the child.



Figure 14. School children

Level of awareness

The riparian communities in Nyando are served by many poorly constructed primary schools and only a few secondary schools. Yet schools are important channels through which dissemination and demonstration of sustainable development in any community can be achieved. The status of education in this area is far below the national standards and few pupils, if any, from these schools reach university level.

There is high rate of school drop out at the primary level, especially the girls who seek either early marriage or child labour as housemaids in urban centers. Similarly, many boys drop out of school in favour of fishing and working in rice and sugarcane plantations. Other academic problems in the area include:

- Poor Accessibility To Schools, Poor Roads
- Under-Staffing,
- Inadequate Sanitary Facilities
- Lack Of Health Facilities
- Temporary Periodic Closure Of Schools Due To Floods
- Low School Enrolment
- Hunger and poverty

Long travel from poor areas along deficient roads and lack of electricity/lighting in the school children's residence also affects their performance.

Consequently, development programs that would have been brought about through educated community members are few and scanty. Moreover, the school age children do not see any incentive or reward to learn due to lack of employment opportunities in the area. Parents often argue that they have no economic base to either build schools or raise school fees for secondary and university education. Their dependence on the exploitation of available resources always results in fabrication of low quality products which have low market value. Thus involving communities and schools to participate in development of the area is always an uphill task and needs deliberate efforts to raise the standards of education in the area.

5. CHAPTER FIVE

5. IDENTIFICATION OF KEY ISSUES, VISION AND OBJECTIVES

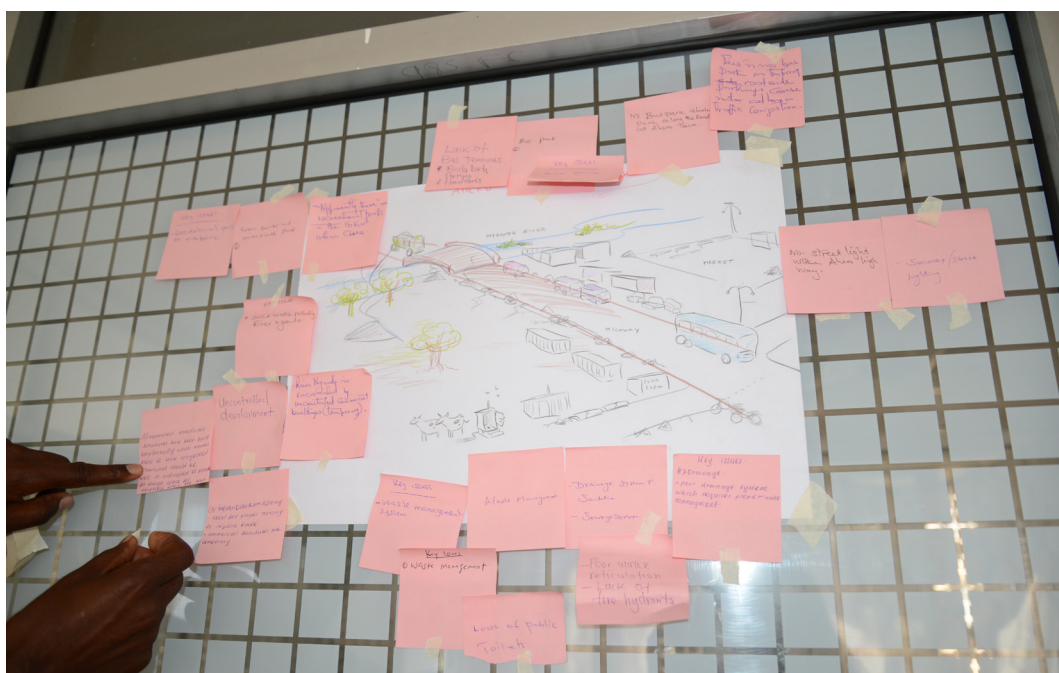
In **September 2016**, at the beginning of the SymbioCity program, the Working Group and Stakeholders made a quick assessment of Ahero's strengths, weaknesses, opportunities and threats, a so called SWOT-analysis. The strengths and weaknesses are basically within the control of the town/county administration, while opportunities and threats are external factors.

In short, this SWOT-analysis captures the main starting point for Ahero to identify and capitalize on its resources while knowing its weaknesses and threats.

STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none"> • Agricultural potential – rice growing established, potential for cotton • Cosmopolitan population brings information and ideas from other urban areas • Political goodwill, leadership pledge • Available labour, underused skilled labour 	<ul style="list-style-type: none"> • Strategic location of Aheruotown, A1 • Natural trade hub • Proximity to premier city Kisumu • Nyando River as a resource for irrigation, economic development and recreational needs
WEAKNESSES	THREATS
<ul style="list-style-type: none"> • Lacking org structure for urban development • Challenges in water supply and sanitation • Lacking SWM system • Outdated development plan, nothing to relate to • Traffic congestion, no bypass, inefficient use of public transport and dangerous for passengers • Poor enforcement of plans • Security challenges (occasionally) 	<ul style="list-style-type: none"> • Uncontrolled population growth • Climate change, flooding, draught • Flooding (flood plain) • Urban sprawl, informal settlements • Land grabbing and disputes • Unemployment • Deteriorating health, HIV prevalence, other diseases

In September/October 2016, the Working Group started to go around to the Stakeholders in the field – boda boda drivers, market vendors, juakali sector, CBOs, NGOs, faith groups – and the picture of Ahero came out clearer. The issues that were considered to be the most serious ones were voiced by all the sectors, e.g. poor drainage and no waste collection. Some had sector-specific concerns; however they seemed to have lower priority. Important feedback was that the stakeholders appreciated the – unusual – opportunity to be asked what kind of project or solution they would like to see, instead of being told “this is the project”.

In **December 2016**, the first Cleanup Day was arranged as part of the public awareness around the environmental issues but also to gather people around the SymbioCity Program (See Cleanup Brochure in appendix). Apart from the clean-up activities, picking litter from the central parts of Ahero and arranging waste transport to Kisumu's dumpsite, there was an official program with a lot of activities around it, including the Governor giving a speech.



In January 2017, the Working Group summarized the Stakeholders' input and also gave their own views on the main challenges. Main learnings in this exercise were that:

- URBAN SUSTAINABILITY REVIEW | AHERO, KISUMU COUNTY

They also formulated and agreed upon a vision for Ahero, based on the inputs from stakeholders, as well as objectives tied to it.

In March 2017, there was a Workshop in Diani, Mombasa with representatives from all counties in which the Ahero team presented their findings and draft solutions. It was an opportunity to compare the often very similar issues and challenges but also to benchmark solutions and get support in developing integrated, feasible and sustainable projects and other solutions.

There was also a River Cleanup Day on 17 March in which the SymbioCity process and findings including the vision was presented to a group of over 300 stakeholders.



Figure 17. The Ahero Ward Administrator talking to Ahero stakeholders during River Nyando Cleanup Day

In May 2017, a Stakeholders' Validation Workshop was arranged in Ahero. The main objective of the meeting was to validate the findings in the Urban Sustainability Review (USR) for Ahero Town and agree upon choice of Quickwin project and the framework for the Change Project.



Figure 18. Participants at the Stakeholders' Validation Meeting, 12th May 2017

In the Validation Workshop, the following Stakeholders attended:

- Pamoja trust which is a community expert
- Market authority
- Boda boda representative
- Bar owners representative
- Jua kali representative
- Farmers representative
- Faith Based representative
- MCA representative
- WRUA representative
- Department of environment and Natural Resources
- Ministry of trade and Tourism
- Ministry of Education
- Ministry of Lands, Housing and Physical planning
- Office of the Sub-county Administrator
- Grassroots trust
- Urban solutions

The participants worked around a matrix (see appendix) Want – Want Not – Have – Have Not. It could be concluded that the major issues are related to liquid and solid waste (depicted in a brownish color in the figure below), directly connected to poor drainage and flooding. Compared to previous stakeholders' workshops, the issue on lacking security and need for improved lights at e.g. the market came out very strongly, while the issue on poor planning and need for better structures and planning for public and private transport was less expressed than before.

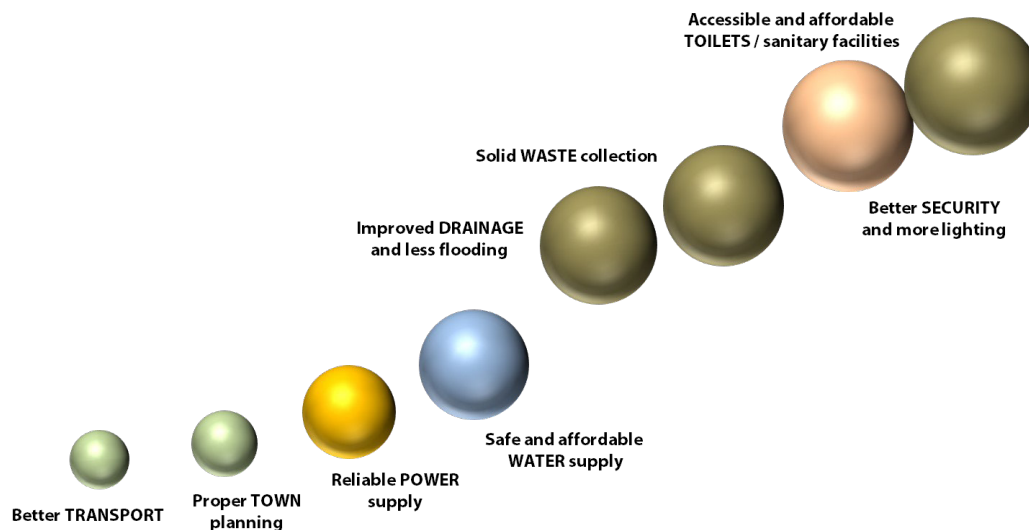


Figure 19. Major issues as expressed by Stakeholders by order of importance

In the Validation Meeting, it was confirmed in summary that Ahero stakeholders' needs are prioritized into ten categories namely:

1. Good drainage system
2. Waste management facilities e.g. refuse chamber and material recovery facility
3. Green spaces e.g. trees along the road verges
4. Modern structure in the markets

5. Security
6. Adequate water supply
7. Modern sanitary facilities
8. Modern shades for each sector
9. Employment and income generating activities
10. Recreational park

Based on the meetings with Stakeholders the Working Group had formulated the following vision:

VISION FOR AHERO TOWN

A clean, healthy, resilient, convergent and people-centered city of prosperity

The vision can be concretized in the following objectives:

CLEAN: Ahero shall be a litter-free town with a sustainable solid waste collection system and functioning stormwater drainage, where Nyando River and other water bodies are protected from pollution.

HEALTHY: Ahero shall be a green and safe place for all, where sanitary conditions are met and public health ensured.

RESILIENT: Ahero shall withstand both environmental challenges such as floods and draught and societal challenges connected to governance, economy and community through open and constructive dialogue and cooperation.

CONVERGENT: Ahero shall be a meeting place, not only as a natural hub but in terms of integrated development planning and urban development that is based on the communal input from all sectors, departments and stakeholders.

PEOPLE-CENTERED: Ahero shall be a place where the development is based on the needs of people, a place for all where everyone has the right and opportunity to be an active part of the town development.

CITY OF PROSPERITY: Ahero shall capitalize on its strategic location and agricultural business by attracting visitors and supporting small- and medium scale businesses to grow to create livelihood and improved living conditions.

The vision was presented to the stakeholders in the Cleanup Day for the first time in December 2016 through the official program following the waste-picking activities and included in the roll-ups at the exhibition and the brochure.



Figure 20. Governor's speech during the Cleanup Day in Ahero Town 2nd December 2017

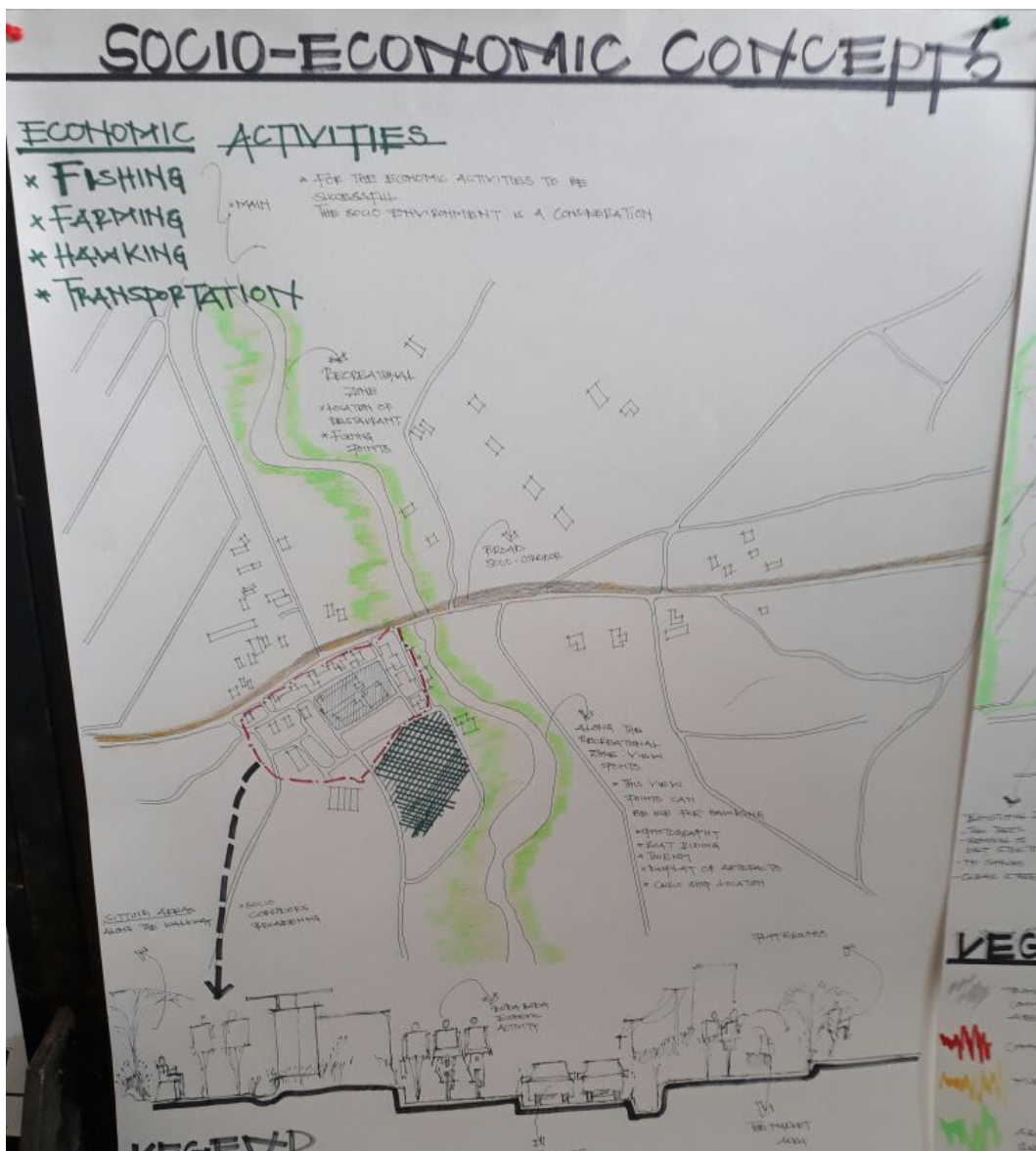


Figure 21. Architecture students at Jomo Kenyatta University of Agriculture and Technology on development in Ahero

6. CHAPTER SIX

6. THE WAY FORWARD

After the diagnosis of the situation in Ahero, the SymbioCity program in Kisumu County will now move into the next phase – developing and implementing solutions and projects that respond to the expressed needs.

After having gone through the process of bringing the multi-sectoral Working Group together and tried a new approach to ideas and project development, communicating more and differently with the stakeholders and tying it continuously to the Steering Committee members through the various departments, the picture of Ahero's challenges, opportunities and priorities has become quite clear and commonly agreed upon. There was a consensus among all that

1. Solid Waste Management And Storm Water Drainage Would Be The Basis For The Quickwin Project, While
2. The Nyando River Multi-Park, Which Covers Several Of The Expressed Needs, Was Picked As A Change project.

The Quickwin Project is estimated to start in late 2017 and run for around 4 months, with a budget of 2,500,000 KSh.

The Change Project is estimated to run for a year. The project details have not been finalized yet, thus the budget is not yet set, but it is estimated to be around 25 million KSh. Several of the proposed components are large investments that by far bypass this budget, however, other funding sources will be sought to build it up piece by piece.

The SymbioCity Program in Ahero is envisaged to end in December 2018.

6.1 Quickwin Project: Integrated Solid Waste Management and Drainage System

Again recognizing that each citizen is entitled to a clean and healthy environment and that this function is donated to the County government (chapter 5 in the Kenyan Constitution 2010 and corroborated under Urban Areas and Cities Act 2011), the poor liquid and solid waste management in Ahero must be addressed.

Although it was already clear from the very beginning of the project period that waste management and drainage were two major challenges, it was not obvious which areas were affected the most. Some prioritization had to be done, and it again transpired that there are no maps or written documentation of the issues or detailed plans on related infrastructure. Thus, a fact-finding exercise with GPS was carried out to identify the hotspots and select priority areas for intervention.



Figure 22. Aerial view showing targeted areas for installation of integrated bins, unclogging and opening of new drains

The overarching objective with the proposed Quickwin Project is to establish and promote waste management and drainage systems by increasing solid waste collection and storm water management from the current situation by Jan 2018.

The Project is envisaged to achieve the following:

1. Established system of reuse of waste, promotion and encouragement of material recovery hence a cleaner environment
2. Creation of income generating activities for women group and the youth group who will be involved in the entire process
3. Reduced waste volume disposed of within the market.
4. Promotion of community involvement and participation in solid waste management, promotion of the 3Rs (reduce, reuse, recycle)
5. Controlled floods and storm water
6. Improved health and sanitation
7. Longer life spans for social amenities and infrastructure
8. Environmental enforcement officers trained on environment

During the project period, 15 champions selected by the stakeholders and 10 school pupils drawn from the neighbouring schools as well as five county staff from Trade, Environment, Health, enforcement and Revenue departments will be trained on waste as resource, methods of waste collection, treatment and disposal, the principle of the 3Rs, community and waste, composting and basic environmental conservation and stewardship.

There will be 10 integrated litter bins for segregation of waste installed at Kaa Dani, the bank, the two petrol stations, the park, the open air market and supermarket. The waste will be collected by locals with handcarts and further transported to Kisumu for disposal. There will be unclogging of around 3 km of drainage channels and opening of 600 m new drainage. At one or two sites, known to be main areas of surface water discharge into Nyando River, there will be a natural filtration and treatment chamber to clean and desilt the water before it enters the river.

These activities will not only be very visible and concrete to the people of Ahero but also create livelihood and tie Ahero closer to Kisumu by organizing the waste collection properly instead of today's irregular services.



Figure 23. Litterbins for segregation of waste will be installed and recycling initiatives elaborated upon.

6.2 Change Project: Nyando River Multi-Park

The concept of integrated solutions has been well received and understood in Ahero. Thus, already from the start, the Working Group focused on finding solutions that would hit several birds with one stone and in which everyone in Ahero would feel included and engaged.

The idea to Nyando River Multi-Park came up during one of many walkabouts in Ahero's central areas. In the area just north of the highway bridge on the left riverbank, there is a rare patch of green space with grown trees providing shade and a nice view of Nyando River. The area has been used for some plant nursery business and for outdoor meetings, but also for dumping and burning large volumes of waste. The northern part is cluttered with shrubs which have provided shelter for locals using the area for defecation in lack of own pit latrines. Several times daily, herds of cows cross the area and pass through the river to the other side for grazing, which has caused erosion.

The Nyando River Multi-Park is not something that will be fully planned or implemented through the SymbioCity Program, but this can be seen as a stepping stone to realize the potential of developing such an area. Part of the project is also that residents of Ahero appreciate the area and can tailor it along the way as good ideas come up. The Multi-Park project should be governed by an inclusive step-by-step approach, providing opportunities for the poor and creating a hub not only for vehicular transport and trade but for social life in a place that the residents of Ahero can be proud of.

The main components that have come up so far are the following:

Transport hub (Bus park)	<p>The road shall be widened and stabilized, ensuring proper surface water run-off and ample space to load/unload passengers. Roofed waiting sheds, lighting, signage etc. are included. A system for a more organized flow of goods and passengers and a local organization to handle it.</p> <p>There should be internet connectivity in the park.</p>
Market stalls	<p>To ease the burden of the central market, this area can provide space for some businesses that will focus on services to the transport hub/bus park/travellers with the aim to prioritize poor or disadvantaged people.</p>
Food stalls	<p>The park area offers a nice, relaxing environment for travellers and locals alike to enjoy a meal. Focus here shall lie on affordable, "home-cooked" food from local produce and a drug-free environment.</p>
Green park	<p>The present beauty of the area shall be preserved and enhanced through planting and nursing the existing flora. It could also serve as a place for learning about useful herbs and plants. A nature trail should guide the visitors.</p>
Restoration of riverbanks	<p>The riverbanks along the park shall be stabilized to avoid further erosion, possibly using plants and fibers rather than concrete or similar.</p>
Cow crossing	<p>Cattle must be guided to cross the river more efficiently without destroying the natural environment or adding to the congestion on the bridge; a floating cow crossing has been discussed as a solution.</p>
Day care center	<p>Kindergarten by the hour to help primarily resident or visiting (single) mothers carry out their market chores without having to carry around children but instead leave them in a calm and safe environment.</p>
Sanitary facilities	<p>Visitors and residents need access to safe and clean sanitary facilities in direct proximity to the bus stop. It can also help other businesses adjacent to the road, since there are few facilities there today.</p> <p>Special attention should be given to make the construction safe for women and children, ensuring proper lighting, water supply and liquid waste management.</p>
Waste management facilities	<p>Bins for source-sorting should be placed in the Multi-Park but also along the road. Guidance on how and why to sort waste shall be provided. Among other things, the Project elaborates on setting up a compost on-site for the food stall waste/organic market waste and a junkshop for buying recyclables.</p>
Information & cultural center with exhibition area and activities	<p>The exhibition can include information on ecology, public health/hygiene, environmental protection and technology, e.g. backyard composting, handicraft and constructions based on recycled materials (plastic, paper, metal, textile) etc.</p> <p>The Multi-Park shall be a natural meeting place, where also temporary exhibitions (art, donor programs, environment, school) or trainings, could be hosted. That, again, may attract more by-passers to make a stop in Ahero, visit the area, take lunch and do their shopping at the same time.</p>

All of the above components of the Multi-Park respond directly or indirectly to needs as expressed by the stakeholders in Ahero. It might be argued that the most obvious need is a proper spatial framework and plan to guide all development in Ahero, however the process would take time, the value of it would perhaps not be clear to the general public and the results from such an intervention would only come after some time.



Figure 24. Joint efforts and committed officials and residents during the the River Nyando Cleanup Day

Looking at the Kisumu County CIDP (2013-2018), there are several proposed projects (although not funded) that are linked to this Change Project, e.g.:

- Construction of Small- and Medium Enterprise (SME) Park in Ahero to facilitate delivery of goods and services to the markets and to boost economic growth
- Improvement of the conditions of market centers, provide lighting and shade
- Construction of Bus parks in all the urban centres
- Dredging of the mouth of Nyando River to open up the river for transport
- Nyando Flood Control, protection of homes and agricultural activities by construction of dykes
- Procurement of machinery for city cleanup - refuse skips, skip loader, garbage trucks, tipper and tractors, litterbins etc.
- To develop and implement a county-wide spatial organization of solid waste management in the county, identification and acquisition of sites for recycling centers.

Some of these project proposals are obvious, such as the need for a bus park and waste collection services, while the idea on river transport is bolder. That idea could change Ahero and how people and goods are moving dramatically and reduce congestion in the urban center but also change the way people look at the river as an asset.

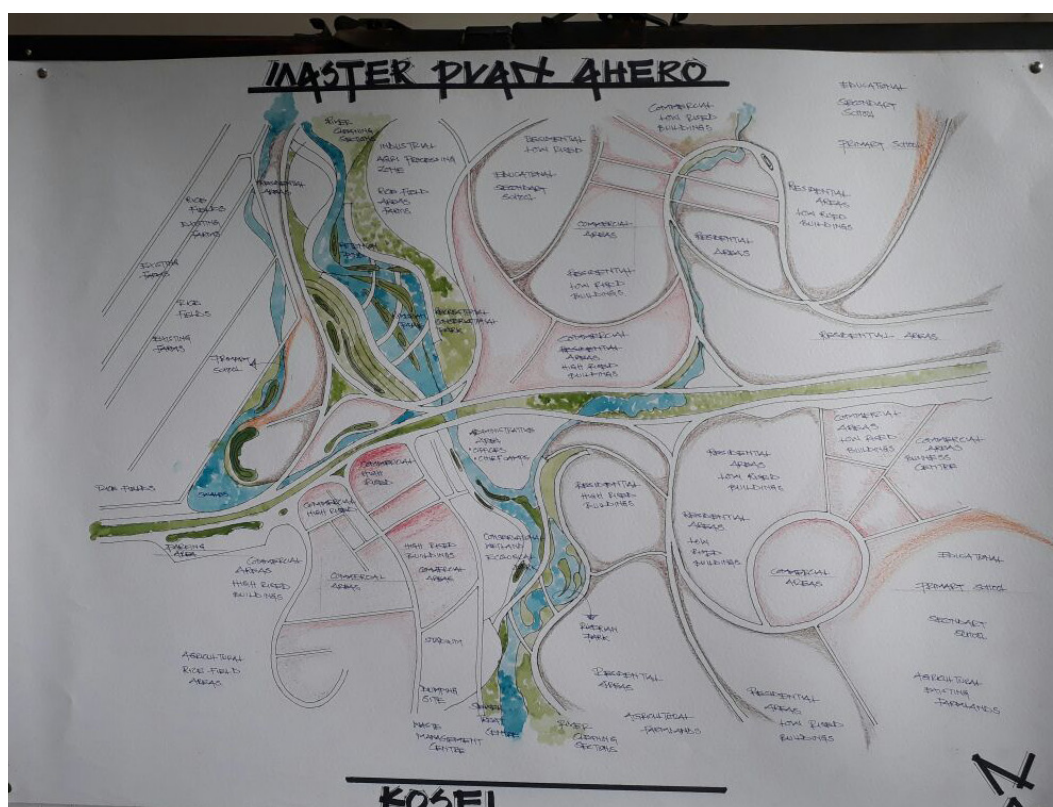


Figure 25. Students' work at JKUAT on possible development and zoning in Ahero

6.3 How do we make it sustainable?

There have been some learnings during the first phase, which must be given attention for a successful continuation.

- Residents in Ahero do not want another study or policy or plan without implementation: the visible result on the ground is paramount to attract and keep the stakeholders' attention and engagement. The actual magnitude of the intervention is less important: also small things count.
- For activities such as Cleanup Days, it is important to choose reliable partners, NGOs, youth groups, women groups, church etc. and to agree on the objectives and the agenda for the for the activity and not involve "the public" broadly in general.
- The stakeholders must be given room to express their needs; however they also need to understand their obligations and responsibilities – and possibilities to take initiatives on their own. Any feeling of helplessness or an attitude of waiting for the ward or county to "fix everything" must be counteracted and a give-and-take culture where everyone can play a role should be fostered.
- It is equally important to manage expectations or it may result in disappointment and loss of faith in the authorities, a trust that may be brittle and is badly needed.
- Because of the lack of data, there must be ample time given to collect information from various sources to build upon for any decision on investment. This is also valid to ensure a proper impact assessment with focus on how the selected project will affect the poor, women, youth or disadvantaged people as well as health, environment and climate.
- The cross-cutting approach should be nurtured to that any project is adjusted to ensure that it includes an impact assessment that little gender and poverty

- The Working Group has, despite the unorthodox way of cross-sectoral work, matured as a group during this relatively short period and come to new insights and better understanding for each other's thematic areas. It would be beneficial to sustain and institutionalize this method with the continued support from the respective departments and the Governor.

The technical team together with teachers need to incorporate education, awareness creation and demonstration of best practices on management of environment to pupils/students, parents and teachers to ensure a sustainable, clean Ahero. To promote community-based sustained environment there is need to intensify and expand activities such as clean up days, celebration of environmental days, and use of multimedia information dissemination techniques to enhance short and long term conservation strategies and achieve significant results.

Looking forward to the implementation of the Change Project and other projects or activities to follow, there is a need for all kinds of commitment – leadership pledge and governance, budget allocations, clear project management with focus on getting the work done, a strong and dedicated working group and involved stakeholders.

An action plan will be developed for the remaining part of the SymbioCity project in Ahero to make sure that everyone knows what to do.

Synergies must also be sought to tap resources and find common ground with other donors, programs, local businesses, NGOs, schools etc. to make the development work in the same direction, to make it more visible and more believable to the people of Ahero.



Figure 26. The Working Group members believe in the Ahero Vision

7. CHAPTER SEVEN

APPENDICES

1. Working Group Members' List
2. Stakeholders List
3. Steering Committee Members' List
4. Cleanup Day 2nd December 2016, Brochure
5. Ahero Validation Report 12th May, 2017

7.1 List of Working Group

Kisumu County – Ahero Town

S/NO	NAME	POSITION	DEPARTMENT
1	DR .SAMUEL ORON	MEMBER	SUB COUNTY ADMIN
2	NALO SAMUEL	MEMBER	WARD ADMIN
3	SOSPETER ONUNGA	VICE PC	ENVIRONMENT
4	WILLKISTER A.ODERAH	SECRETARY	EDUCATION
5	FREDRICK ANYANGO ODIRE	MEMBER	ENERGY
6	GEORGE OGUNDO	ALTERNATE MEMBER	TRADE
7	KENNEDY OCHIENG	MEMBER	GOVERNOR COMMUNICATION
8	BELINDAH OLOO	MEMBER	GOVERNOR COMMUNICATION
9	THOMAS OUKO	MEMBER	TRADE
10	ATITO JAFETH	MEMBER	AGRICULTURE/
11	DAN KIDHA	MEMBER	GOVERNORS
12	ELEKIA OTIENO	MEMBER	HEALTH
13	CHARLES OGADA	MEMBER	CHAIR AHERO TRADERS
14	PASCAL OULO	MEMBER	INTERN PLANNING
15	SARAH A. OGUYA	ALTERNATE MEMBER	ENERGY
16	EMMA OGINGA	MEMBER	WATER
17	SULE STEPHEN	CO-ORDINATOR	PLANNING, LAND
18	BERNARD OJWANG	MEMBER	ROADS AND INFRASTRUCTURE
19	EVERLYNE OTIENO	MEMBER	URBAN DEVELOPMENT SPECIALIST
20	KARIN EBERLE	MEMBER	SYMBIOCITY FACILITATOR

7.2 List of Stakeholders

Kisumu County – Ahero Town

1. MASENO UNIVERSITY
2. BAR OWNERS ASSOCIATION
3. TRANSPORTERS
4. BODABODA
5. HANDCART
6. FAITH BASED ORGANISATION
7. CHILDREN REPRESENTATIVE
8. SHOP OWNERS
9. INFORMAL STRUCTURES
10. FARMERS
11. WATER USERS MANAGEMENT ASSOCIATION (NYANDO)
12. NEMA
13. LVEMP
14. FORESTRY DEPARTMENT
15. WATER RESOURCE MANAGEMENT AUTHORITY
16. PAMOJA TRUST
17. PRACTICAL ACTION
18. JOMO KENYATTA UNIVERSITY OF TECHNOLOGY
19. AHERO TRADERS ASSOCIATIONS
20. DEPUTY COUNTY COMMANDER
21. AREA CHIEF AND THE ASSISTANT CHIEF
22. OFFICER COMMANDING AHERO POLICE STATION
23. FINANCIAL INSTITUTIONS

7.3 List of Steering Committee

Kisumu County – Ahero Town

1. Governor of Kisumu County
2. County Secretary
3. CEC Finance
4. CEC Planning and Finance
5. CEC Roads and Infrastructure
6. CEC Trades and Tourism
7. CEC Water and Environment
8. CEC Health
9. CEC Education and Social Services
10. Chief Officer Lands, Physical Planning and Housing
11. Chief Officer Roads and Infrastructure
12. Chief Officer Water and Environment
13. Chief Officer Trades and Tourism
14. Chief Officer Special Programs
15. Member of County Assembly Ahero Ward



AHERO TOWN CLEAN-UP DAY

2nd December 2016

Join us in our vision for Ahero Town:
*A clean, healthy, resilient,
convergent and people-centered
city of prosperity*

The SymbioCity Kenya (SCK) Program is a partnership between



WHAT IS SYMBIOCITY?

It is a concept providing guidance and tools to support sustainable urban development.

It is based on the principles of *symbiosis* – integrated, cross-departmental, inclusive and participatory planning and development.

It is also about turning challenges into opportunities.

WHO IS INVOLVED IN SYMBIOCITY?

Everyone.

The Working Group represents different departments. It works closely with the Stakeholder Group with members from private sector, academia, civic society, and media. A Steering Committee with the highest decision-making authority provides oversight and support. Sweden provides technical assistance/capacity development.



The SymbioCity concept starts with basic needs – health, comfort, safety, life quality. Sustainability is achieved through balance between environmental, economic and social factors. And the development is depending on urban systems, institutional factors and spatial dimensions. Everything is included.

WHAT HAPPENS NEXT?

Together with the stakeholders, the Team will start designing popularly agreed projects based on the input and testimonies about challenges in Ahero.

The selected project will be partly funded by the Swedish government through a seed fund.

The program ends in December 2018.

Do you want to know more or share Ideas?

Contact Ward Administrator Samuel Nalo or Stephen Sule, Project Coordinator

WHY A CLEAN-UP DAY?

The Clean-Up Day targets a challenge voiced in all stakeholder meetings – the need for a cleaner Ahero town.

It is an excellent opportunity to bring people together, share knowledge and find synergies.

Waste is a resource! Working together, we can change things and create a sustainable future.



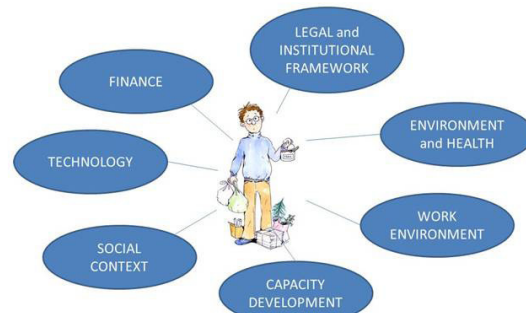
IT'S JUST WASTE – OR?

Waste management is not just about collection and landfilling.

Sustainable waste management requires the coordination and cooperation between government offices, private sector, NGOs, academe and the general public.

Sustainable waste management is not merely a technical issue. It requires cross-sectoral planning, regulatory framework and long-term financing.

Sustainable waste management systems must be designed to fit.



7.4 Kisumu County, Ahero Validation Report 12th May, 2017

Views from stakeholders on current challenges and needs:

SN	SECTOR	WANT NOT	WANT	HAVE	HAVE NOT	SOURCE OF INFORMATION
1.	Bodaboda	<ul style="list-style-type: none"> - Uncoordinated traffic. - Accident from motorists - Solid and liquid waste. - Clogged drainages - Poor roads - harassments by law enforcers 	<ul style="list-style-type: none"> - Well designed bridge accommodating all manner of traffic - Parking lot - Road reserve demarcated - Flyover for pedestrians - Well equipped health facilities - Shades - Proper town planning 	<ul style="list-style-type: none"> - Big population - Market/urban centre - Business activities - Good and accessible roads - Proximity to Kisumu city - Rice plantations - Business centres - Schools 	<ul style="list-style-type: none"> - Modern boda boda sheds - Designated parking lot. - Well equipped health facility - Dedicate lane for cyclists 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
2.	Matatu	<ul style="list-style-type: none"> - Obstruction - Harassment by law enforcers - Uncoordinated structures 	<ul style="list-style-type: none"> - Waiting bay - Parking lot - Sanitary facility - Covered drain - Dumping sites 	<ul style="list-style-type: none"> - Structure (office) - High traffic - Good and Accessible roads - Stone pitched drain 	<ul style="list-style-type: none"> - Waiting bay - Parking lot - Sanitary facility - Covered drain - Dumping site 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
3.	Transporters	<ul style="list-style-type: none"> - Poor planned town - Illegal structures along the road 	<ul style="list-style-type: none"> - Shades - Power supply - Toilet facilities - Water source - Getting license for transporters - Good drainage - septic tank 	<ul style="list-style-type: none"> - High traffic - Business opportunities - Good and motorable roads 	<ul style="list-style-type: none"> - Shades - Power supply - Toilet facilities - Water source - Getting license for transporters - Good drainage - septic tank 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
4.	Farmers	<ul style="list-style-type: none"> - Water shortage during dry seasons - Unhealthy competition from neighboring counties - Flooding - Involvement in development of policies - Pollution of River Nyando 	<ul style="list-style-type: none"> - Incentives in the form of loans and seeds - Uninterrupted water supply - Affordable farm implements - Bench marking - Access to information - Access to markets for their produce 	<ul style="list-style-type: none"> - River Nyando - Rice mills - Rice plantations - Good roads - Ready market - Business centre - cooperative societies 	<ul style="list-style-type: none"> - Incentives from the Government - Adequate capacity for value addition for produce - Adequate capacity to irrigate farms. 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector

SN	SECTOR	WANT NOT	WANT	HAVE	HAVE NOT	SOURCE OF INFORMATION
5.	Open air traders	<ul style="list-style-type: none"> - Poor drainage - Waste - Congested and poor planned market - Livestock roaming in the markets - Poorly lit town - Flood - Insecurity 	<ul style="list-style-type: none"> - murraming of the market - Shades instead of stalls - Recreational/open ground - Good drainage - Water network and supply - Toilet facilities - Land for expansion - Reorganizing the market centre to achieve space - Zoning - Livestock zone - Litter bins - Security - Floodlights - Child care center for children - Storage 	<ul style="list-style-type: none"> - Government structure - County Government Ministries - Health facilities - Few market sheds - Few stalls - Inadequate water supply - Toilets and sanitary facilities - Access road - Inadequate power network - River - Rice Mills 	<ul style="list-style-type: none"> - murramed market - Shades instead of stalls - Recreational/open ground - Good drainage - Water network and supply - Toilet facilities - Land for expansion - Reorganizing the market centre to achieve space - Zoning - Livestock zone - Litter bins - Security - Floodlights - Child care center for children - Storage 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
6.	Kiosks and shop owners	<ul style="list-style-type: none"> - Solid waste - Clogged drainages - Unplanned structure on top of drain 	<ul style="list-style-type: none"> - Waste bins - Dumping ground - Good drainage - Modern stalls - Sanitary facilities 	<ul style="list-style-type: none"> - Few sanitary facilities - Health facility - Big population - Agricultural produce - Good roads 	<ul style="list-style-type: none"> - Waste bins - Dumping ground - Good drainage - Modern stalls - Sanitary facilities 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
7.	Hand carts	<ul style="list-style-type: none"> - Obstruction 	<ul style="list-style-type: none"> - Well planned town - Shed - Sanitary facility - Designated zone 	<ul style="list-style-type: none"> - Market - High traffic - Good roads 	<ul style="list-style-type: none"> - Sheds - Good drains - Designated zones - Toilets 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
8.	Bar owners	<ul style="list-style-type: none"> - Insecurity - Liquid and Solid waste - Illegal structures 	<ul style="list-style-type: none"> - Good drainage system - Litter bins - Refuse chambers - Light - Sewer system - Parking for customers 	<ul style="list-style-type: none"> - Business centre - Good road network - Government structure - River - Health facilities - Schools - Learning institutions 	<ul style="list-style-type: none"> - Good drainage system - Litter bins - Refuse chambers - Light - Sewer system - Parking for customers 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector

SN	SECTOR	WANT NOT	WANT	HAVE	HAVE NOT	SOURCE OF INFORMATION
9.	Welders	<ul style="list-style-type: none"> - Waste everywhere - Clogged drains - Water shortage - Lack of space 	<ul style="list-style-type: none"> - Proper site for operation - Good drainage system - Waste disposal facility - Revolving funds for youth - Uninterrupted power - Water source - Funds to train at the village polytechnic available (Boya) - Facilitate youth for grade test - Security 	<ul style="list-style-type: none"> - Ready market - High population - Health facilities - Sanitary facilities - Good roads 	<ul style="list-style-type: none"> - Proper site for operation - Good drainage system - Waste disposal facility - Revolving funds for youth - Uninterrupted power - Water source - Funds to train at the village polytechnic available (Boya) - Facilitate youth for grade test - Security 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
10.	Carpenters	<ul style="list-style-type: none"> - Lack of space - Insecurity - Disorganized market 	<ul style="list-style-type: none"> - Need of site for their work - Toilet facilities - Good structures - Space for trade - Construction of industry - Job opportunity - Security 	<ul style="list-style-type: none"> - Good roads - Ready market - Population - Urban centre 	<ul style="list-style-type: none"> - Need of site for their work - Toilet facilities - Good structures - Space for trade - Construction of industry - Job opportunity - Security 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
11.	Touts	<ul style="list-style-type: none"> - Harassments by enforcement agencies - Obstruction of road users 	<ul style="list-style-type: none"> - Parking lot - Traffic lights - Toilet facilities - Shades for passengers - Insecurity - Poor waste management - Standard kiosk structures 	<ul style="list-style-type: none"> - Highway - Temporary office - Travelers 	<ul style="list-style-type: none"> - Designated bus park - Established office - Toilets - Passenger shades 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector
12.	Mechanics	<ul style="list-style-type: none"> - Power interruptions - Relocation to remote locations - Harassments - High cost of obtaining trade test certificates - Poor structures within the town - Few toilet facilities - Insecurity - Water problem 	<ul style="list-style-type: none"> - Standard structures for mechanics - Uninterrupted power supply - Affordable trade test certificates - Accessible /affordable sanitary facilities - Enhanced security - Affordable safe drinking water 	<ul style="list-style-type: none"> - Makeshift structures - Skills - Human resource - Power supply - Market for goods and services 	<ul style="list-style-type: none"> - Standard structures for mechanics - Trade test certificates (Majority) - Accessible /affordable sanitary facilities - Enhanced security - Affordable safe drinking water 	<ul style="list-style-type: none"> - Transect walk - One on one discussion - Group discussion - Meeting with the sector



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