Report on documentation and evaluation of Urban HEART pilot in Nakuru, Kenya

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Prepared for WHO Regional Office for Africa by

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Urban HEART pilot implementation in Nakuru Municipality, Kenya: How far are we?

This document is based on the findings of the evaluation of the Municipal Council of Nakuru, Kenya, of the progress in pilot implementation of Urban HEART since 2009. The document was prepared by consultants Franklin Okonji and Felix Mulama, Infore Services, PO Box 42752, Nairobi, with technical advice from Hawa Senkoro and Wilfred Ndegwa of the World Health Organization. Contacts: Franklin Okonji franklinokonji@gmail.com, Wilfred Ndegwa ndegwaw@ke.afro.who.int.

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Executive summary

The main objective of this study was to evaluate the process and impact of Urban HEART pilot implementation and document its application by the Municipal Council of Nakuru.

Specifically the focus of the study was to describe the elements of Urban HEART, as adapted to the pilot site; describe the processes, structures and mechanisms of implementation; review and validate the data generated for the health equity assessment; describe intersectoral actions generated or strengthened by the process; describe implementation issues, including hindering and facilitating factors; describe the accomplishments of the project; and identify recommendations for improving and scaling up the implementation of Urban HEART.

Two sensitization workshops were held to communicate the Urban HEART concept and develop consensus on the two pilot sites. Langa Langa and Rhonda wards were selected as pilot sites after lengthy deliberations in the workshops. The criteria for selecting the two sites were socioeconomic status and geographical proximity. Both sites are classified as peri-urban areas and are less affluent than more urban settings, but Langa Langa is better planned than Rhonda, whose infrastructure is unplanned and poorly developed in terms of sanitation and water supply.

During the two sensitization workshops, the elements of Urban HEART were introduced to stakeholders. After the workshops, an urban health equity assessment was conducted. Later, a workshop was held to discuss and validate the findings of the assessment.

The final report has now been shared and a task force for implementation of the response part of Urban HEART is in place (comprising eight members selected on the basis of the key domains of Urban HEART).

Response implementation mechanisms are suggested in the survey report. Based on the analysis of the evidence generated from the research in the two locations, broad intervention measures are proposed.

A total of eleven indicators were selected for guiding health equity response. Of the eleven indicators, nine were disaggregated by the two geographical locations (Langa Langa and Rhonda). These indicators fall in four broad Urban HEART policy domains (physical environment and infrastructure, social and human development, economics, and governance).

While great effort was made to generate indicators for measuring equity within the health determinants as outlined by the Urban HEART indicator guide, the health outcome indicators were not easily measurable. From key informant interviews with the health assessment team it was observed that it was a challenge to obtain data for measuring some indicators, especially the health outcome indicators. Capacity for computing some of the health outcome indicators, such as mortality rates and life expectancy, was also lacking. While there was intersectoral collaboration during the Urban HEART pilot pre-assessment stakeholder meetings, the actual assessment was mainly carried out by a consultant and the Municipal Council Department of Public Health.

Sensitization and validation workshops emphasized intersectoral collaboration in piloting Urban HEART. Participants for these workshops were drawn from national government and local government.

A number of factors facilitated successful piloting of Urban HEART and spearheading of actions to reduce health inequities in the Municipal Council of Nakuru.

Urban HEART piloting received full council support and wide acceptance from participants during sensitization workshops. Another supportive factor was the availability of skilled staff that could oversee implementation of Urban HEART. Availability of the urban health equity assessment findings in the form of a report was also observed to be a pivotal facilitating factor for the implementation of Urban HEART.

Intersectoral collaboration emerged as the key pillar to the successful implementation of Urban HEART. Existing intersectoral collaborations in other development forums within the municipality acted as a catalyst for quick formation of an intersectoral team for Urban HEART pilot implementation.

The hindering factors identified included failure to get support for the implementation of the findings of the scoping paper on social determinants of health, which was prepared previously with WHO; lack of implementation resources; inadequate advocacy strategies; inadequate cooperation from the Urban HEART pilot assessment consultant; no clear timelines from inception and way forward set by the consultant; and delay in submission of the final assessment report. Despite the Urban HEART pilot receiving the support and acceptance of councillors, it had not been officially sanctioned in a full council seating. It is only through full council endorsement that Urban HEART will gain wider acceptance, support and serious commitment by the councillors, who are the policy agents of the municipality.

Key accomplishments of the Urban HEART piloting are the assessment report and the fact that some of the councillors are already applying the knowledge they learnt from Urban HEART sensitization and pilot study findings to plan for resource allocation within the municipality.

The evaluation makes recommendations based on discussions with stakeholders and observations carried out during Urban HEART pilot documentation and evaluation. These include wider sharing of the Municipal Council of Nakuru Urban HEART assessment report among stakeholders; scaling up Urban HEART advocacy to gain the support of all council officials; strengthening intersectoral collaboration by bringing together different actors (central government officers, local government officers, local administration, civil society, nongovernmental organizations and representatives from the community); strengthening the Urban HEART stakeholder steering group and developing an action plan to roll out response; and enforcing and actualizing the concept of community participation in the Urban HEART process.

In conclusion, the evaluation identifies the key achievements of the Nakuru Municipality Urban HEART pilot as the following: stakeholder engagement during mobilization meetings and choice of pilot sites; implementation of the health equity assessment in the two identified

pilot sites within the municipality (Rhonda and Langa Langa); involvement of key stakeholders in the validation of the study findings; presentation of the final assessment report to inform response; and formation of a task force for the implementation of the Urban HEART response phase.

To actualize response, the task force has to emphasize the need for the endorsement of the Urban HEART concept in a full council meeting. This should be followed by drafting of a response implementation plan by the response task force and sharing this in a stakeholder workshop for vetting and approval. Additionally, there is a need to focus on stakeholder mobilization and intensive advocacy of the Urban HEART concept to make it popular among the key stakeholders within the municipality and the communities residing within the pilot sites. Intersectoral collaboration and community involvement would be key during the implementation of the response. Finally, all processes should be monitored and documented. This could be achieved through formation of an Urban HEART monitoring and evaluation framework.

1. Introduction

1.1 Background and rationale of Urban HEART

The Urban Health Equity Assessment and Response Tool (Urban HEART) was developed by the World Health Organization (WHO) to equip policy-makers with the necessary evidence and strategies to reduce inter-city and intra-city health inequities. The tool was designed as a user-friendly guide for decision-makers at national and local levels to analyse inequities in health between people living in various parts of cities or belonging to different socioeconomic groups within and across cities. It is also intended to facilitate decisions on viable and effective strategies and interventions to reduce health inequities (*1*).

The adoption and use of Urban HEART by national and local governments, community organizations and urbanized or rapidly urbanizing communities is intended to:

- guide policy-makers and key stakeholders to achieve a better understanding of the social determinants of health and their consequences for people living in a city;
- stimulate policy-makers, programme managers and key stakeholders to make strategic decisions and prioritize specific actions and interventions that are tailored to the needs of vulnerable and disadvantaged groups in cities;
- assist communities to identify gaps, priorities and required interventions to promote health equity;
- support programme managers in improving intersectoral collaboration and communication strategies relating to the social determinants of health (*1*).

Urban HEART is expected to achieve the following:

- local and national authorities equipped with relevant evidence to inform important decisions related to prioritization and resource allocation;
- communities mobilized and empowered to promote health equity;
- multiple sectors engaged in addressing common goals, including the promotion of health equity;
- people living in cities with better health and social status, and reduced inequities in health between population groups;
- core elements of Urban HEART implementation are therefore sound evidence, intersectoral action for health, and community participation.

To ensure feasible, efficient and sustainable application of Urban HEART, it is important that its implementation is integrated into the planning cycle of local authorities, such as planning and budgeting exercises. Therefore, the nature of Urban HEART implementation will be cyclical rather than linear.

The cycle consists of four phases – health equity assessment, response prioritization, policy formulation and programme implementation. This ensures consistency with the local governance process, allows the integration of the results of the assessment into the local

debate, and facilitates linkages with other sectors. It also ensures better chances of influencing budget allocation for health equity issues by putting it at the heart of the local policy-making process (*1*).

Through the piloting process, a number of cities across the world have already demonstrated how Urban HEART can be used to assist local communities and governments, both local and national, to proactively tackle health inequities.

Kenya was selected as one of the pilot countries for the application of Urban HEART. The Municipal Council of Nakuru was chosen as the implementation site. The processes, mechanisms and achievements of the Urban HEART implementation in Kenya therefore need to be documented and evaluated. This will provide the basis for continuous improvement of the tool, encouraging advocacy of its use and creating greater consciousness to promote urban health equity.

1.2 Background to Municipal Council of Nakuru

Geography

Nakuru is the fourth largest town in Kenya after Nairobi, Mombasa and Kisumu.
It is located north-west of Nairobi at the heart of the Great Rift Valley. It is approximately 156 kilometres from the Kenyan capital city of Nairobi, 650 kilometres from Mombasa and 182 kilometres from Kisumu. It lies just south of the equator and at a longitude of approximately 36 degrees east, at an altitude of 1859 metres above sea level (*2*).

Nakuru town is situated between the Menengai Crater to the north and Lake Nakuru to the south. After the 1992 boundary extension, the Municipal Council now covers an area of 290 square kilometres, of which the town takes 102 square kilometres, while the rest, 188 square kilometres, is covered by the famous Lake Nakuru National Park. These geophysical characteristics, and the proximity between the town and the lake, result in a beautiful but fragile urban and natural environment (*3*).

Located along the twin rail and road transport corridor from Mombasa at the Indian Ocean to the Great Lakes region, Nakuru becomes a transit route for both national and international flows of traffic, linking Mombasa through Nairobi to western Kenya, Uganda and the rest of Africa (*2*).

Nakuru is the headquarters of Rift Valley Province and serves as an administrative, industrial, commercial and service centre for the surrounding rich agricultural hinterland. It is also linked with other towns in the region by rail and road networks (*2*). Locally, the town is the headquarters of Nakuru district and a principal town in a hierarchy of over 300 trade and service centres in the district. The good transport linkages facilitate a mutual exchange of goods and services between Nakuru and these centres. Apart from playing an administrative role, the town serves as the centre for agro-based industrial and manufacturing activities.[1]

At the municipal level, it offers a variety of services and jobs for a resident population of over 500 000 within its boundaries and in the surrounding peri-urban areas. The town is

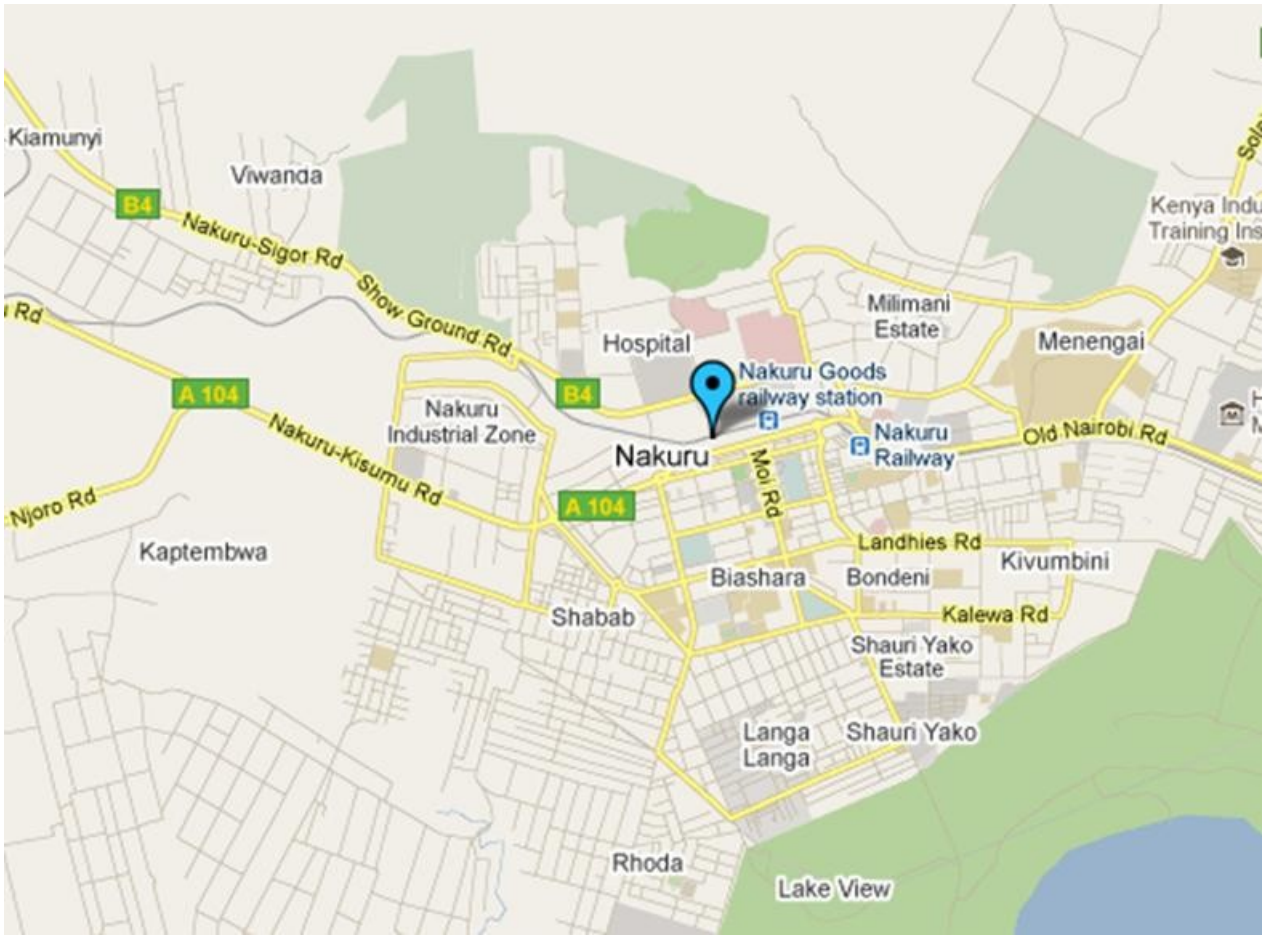
[1] Municipal Council of Nakuru website http://195.8.196.32/~nakurumu/.

located in the midst of a concentration of geographical features that constitute the Lake Nakuru catchment area. These include Menengai Crater to the north, Bahati Highlands to the north-east, Eburu Hills and Lake Nakuru to the south, and the Mau Escarpment to the west. Lake Nakuru is home to thousands of flamingos and a number of big game animals (*3*).

Nakuru is a cosmopolitan town hosting various races and tribes of Kenya, with different cultures, ideologies, religions, politics, and social and economic aspirations. It is the "agricultural capital of Kenya" and is famous for its agro-based industries. These include production of cooking oil, soap, batteries, milk and milk products, wheat and maize flour, blankets, pyrethrum products, mineral water and agricultural implements (*3*).

Figure 1 presents a street map of Nakuru, showing the location of the pilot sites, Rhoda and Langa Langa.

Figure 1. Municipality of Nakuru street map



Source: Google Earth.

Organizational structure of the council

The vision of the council is "To be the leading Local Authority in quality service delivery in Kenya", while its mission is "To deliver services efficiently and effectively through a participatory approach".[2]

The Municipal Council of Nakuru, like any other local authority, has its mayor and councillors elected by residents. It has a total of 15 wards, each headed by an elected councillor: Langa Langa, Rhonda, Bondeni, Kivumbini, Shauri Yako, Viwanda, Menengai, Lakeview, Baruti East, Baruti West, Hospital, Shabab, Kaptembwo, Biashara and Nakuru East.

The council has eight technical departments each headed by a chief officer, all under the town clerk as the chief executive, who is an appointee of the Minister of Local Government. The chief officers are charged with the responsibility of implementing council policies, functions and services. The eight departments are administration, environment, infrastructure, budget and revenue, social services and housing, education, public health, and planning and development.[3]

1.3 Background to the Urban HEART pilot area

Note: Much of the information in this section is drawn from the *Final draft report on the Urban HEART pilot-testing project*, I.N. Basweti, 2009 (*4*).

Langa Langa and Rhonda civic wards are situated on the north-western side of Nakuru town. Langa Langa ward covers an area of 0.8 square kilometres and is made up of Racetrack and Langa Langa I, II and III estates. It has a population of 10 926 inhabitants. It borders Biashara ward to the north along Kanu Street and Lakeview ward to the east along Mashindano Street. It shares a boundary with Rhonda to the west along Baringo Road and Lake Nakuru National Park to the south.

Langa Langa falls within Zone 1 of the municipal planning units, and its development is provided with supportive infrastructure such as electricity and a gridiron road network providing efficient access to residential areas, even during wet seasons. Though predominantly residential and without a market, the ward is adequately served by a well-established residential-cum-commercial centre providing business premises for retail and service shops.

Langa Langa offers a wide range of dwellings, from permanent one bedroom to multiple bedroomed high-rise houses with water infrastructure and organized systems of refuse collection. Rent costs in this ward range from 5000 to 15 000 Kenya shillings (Ksh) (US$ 60–180), attracting tenants of middle-income level.

Residents of Langa Langa have easy access to health care and walk a maximum of 500 metres to Langa Langa health centre, which provides curative, investigative, preventive, antenatal, and maternal and child health care at subsidized costs.

[2] Municipal Council of Nakuru website http://195.8.196.32/~nakurumu/.

[3] Ibid.

Pre-primary and primary education services are available in Langa Langa. There are three government-aided primary schools and two privately run primary schools. Enrolment in public primary schools currently stands at 3526 pupils, represented by 1826 boys and 1700 girls, with a classroom density of 49 pupils per class. The maximum travel distance to a public school in this ward is 500 metres.

Rhonda ward covers 4.2 square kilometres and consists of Rhonda and Mwariki estates. It borders the upper-middle-income Shabab ward to the north, Langa Langa ward to the east, the agrarian Baruti East ward along River Njoro to the south, and the low-income settlement of Kaptembwo ward to the west.

Development control in Rhonda ward is non-existent. Housing development is haphazard and does not take cognizance of the required standards, disregarding essential social, aesthetic and environmental long-term impacts on the inhabitants of the estate.

The area is dominated by randomly developed temporary dwellings, often as many as 30 single rooms on a plot and lacking sufficient toilets, electricity or water. House rents range from Ksh 300 to Ksh 1800 (US$ 3.5 to US$ 21) a month.

Poor access to water for domestic consumption is a problem affecting vast areas of the municipality. Households in Rhonda, though connected to the water distribution network, have dry taps most of the time and have to rely on private water vendors.

The majority of roads in Rhonda are earth or gravel without storm water drains and are impassable during wet seasons. During heavy rains run-off damages physical developments, especially toilets and weak buildings.

Though Rhonda is home to the severely underutilized Njoro sewerage works, disposal of human waste in this ward is mainly through pit latrines, and waste is disposed into open drains leading to blockage and unhealthy living conditions.

The ward is well served with electric power grids but the cost of installing electricity is still unreachable for a majority of landlords in Rhonda. Many of them struggle to cope with water and sanitation infrastructure problems and, perhaps, are without an idea about how to deal with electricity bills in the mainly communal dwellings.

Markets are provided by the council. Wakulima and Top Market are the main wholesale and retail markets and are located at the central business district in Afraha ward.

Other markets are in Lanet, Bondeni, Langa Langa and Shabab wards, but none has been provided in Rhonda ward. Residents carry out a number of business activities – including sale of grains, vegetables and cooked food – by the roadsides and along electric power way-leave. They are subjected to the vagaries of weather and insecurity and are without sanitary facilities.

Provision of social services and amenities is under the Department of Social Services and Housing of the Municipal Council of Nakuru. There are a number of social halls and smaller sports grounds in residential areas in planned zones, but these are totally lacking in the low-income settlements.

Public health care facilities are scarce in Rhonda. Residents walk a minimum of 3 kilometres to the nearest municipal clinic and a further 2 kilometres to Langa Langa health centre or provincial general hospital for laboratory tests.

Rhonda ward has four public primary schools – Mwariki, Kibowen, Heshima and Eileen Gochoch – with an enrolment of 4040 pupils (1975 boys and 2065 girls). Classroom density in this ward stands at 48 and compares well with the municipal average of 47. However, on average pupils in Rhonda walk longer distances to school (minimum of 1 kilometre) due to the vastness of the ward and the skewed distribution of public schools.

2. Urban HEART documentation and evaluation: objectives and methodology

2.1 Rationale for documentation and evaluation of Urban HEART in Nakuru

The technical documentation and evaluation results, targeted for wide dissemination, will be useful for stakeholders in other urban areas to become familiar with Urban HEART and eventually utilize the tool to address health differentials and socioeconomic determinants of health. It is envisioned that the expansion of the use of Urban HEART in different cities and countries will contribute to the broader goal of using an equity perspective in health and development work, with the end goal of narrowing inequities in health.

2.2 Documentation and evaluation objectives

The objectives are twofold:

- to document how Urban HEART was applied
- to evaluate the process and impact of the Urban HEART pilot application.

The documentation focuses on objectively describing how things were done and what resulted from it. The evaluation will rely on both facts and subjective assessments to describe how well things were done (process evaluation) and the immediate effects and outputs (impact evaluation).

Specifically, the aims of the documentation and evaluation are:

- to describe the elements of Urban HEART as adapted to the pilot site;
- to describe the processes, structures and mechanisms of implementation;
- to review and validate the data generated for the health equity assessment;
- to describe intersectoral actions generated or strengthened by the process;
- to describe implementation issues, including hindering and facilitating factors;
- to describe the accomplishments of the project;
- to identify recommendations for improving and scaling up the implementation of Urban HEART.

2.3 Scope of work

In order to achieve the stated objectives, the independent evaluator(s) is expected to:

- conduct a review of reports, documents, and related literature on the Urban HEART experience in the Municipal Council of Nakuru, Kenya;
- consult with the WHO Country Office, Ministry of Health, Nakuru Municipality, and project teams for the planning and conduct of the documentation and evaluation;
- conduct site visitation and photo-documentation in the pilot site;

- conduct key informant interviews and focus group discussions, as necessary;
- assess and consolidate reports from the pilot site;
- conduct review and validation of the data generated for the health equity assessment in the pilot site;
- develop an initial draft of the documentation and evaluation report;
- facilitate the review of the draft by the WHO Country Office, Ministry of Health, Nakuru Municipality, and project teams;
- finalize and submit the documentation and evaluation report and other technical deliverables (see next section).

2.4 Deliverables

The following are the expected outputs from the documentation and evaluation:

- full final version of the documentation and evaluation report (including annexes, as appropriate);
- executive summary of the report (not more than three pages);
- Powerpoint presentation of the report (not more than 25 slides);
- photo-documentation of the project (incorporated into the report as per annex E).

2.5 Methods

To effectively implement the Urban HEART documentation and evaluation, the following methods were applied: review of secondary data with a focus on Urban HEART policy domains, direct observation of the two pilot sites of Langa Langa and Rhonda, photo-documentation, and key informant interviews with stakeholders and beneficiaries.

The evaluation approach utilized participatory methodologies, involving the Nakuru Municipality local authority officials, local government departments, community members, and community-based organizations involved in Urban HEART piloting. A meeting was also held with the Urban HEART implementation team comprising the chief public health officer, public health officer and information officer.

2.6 Target population for evaluation

- beneficiaries sampled from Rhonda and Langa Langa project sites;
- organized groups from the same community, for example women's groups;
- Urban HEART implementation team;
- Municipal Council departmental heads (planning, environment, public health, public works, water);
- government officials.

2.7 Data collection tools

The following tools were used to collect data:

- A key informant interviewer guide was developed and used for interviews with the key stakeholders in the implementation of the project and with beneficiaries in selected Rhonda and Langa Langa pilot sites (annex H).
- An indicator documentation guide was developed and used to document the existing indicators for validation and monitoring of the Urban HEART piloting (annex I).

2.8 Gaining access to field sites

The Municipal Council of Nakuru Urban HEART pilot field team sought permission from the local administration to access and carry out documentation in Rhonda and Langa Langa project sites.

2.9 Role of Municipal Council of Nakuru and collaborators

Nakuru Municipality provided support for the entire exercise, which included the venue for preparatory meetings, project documents necessary for the review, and mobilization of communities, government departments and other community structures to effectively participate in the evaluation.

3. Findings

3.1 Elements of Urban HEART, as adapted to the pilot site

During the sensitization meetings, the definition, justification and objectives of Urban HEART were explicitly explained by the consultant.

The objectives of Urban HEART pilot implementation by the Municipal Council of Nakuru were explained as follows:

- to raise awareness of the people in the two wards on health inequities;
- to create and improve physical, social and environmental conditions;
- to mobilize people to mutually support each other through intersectoral and intrasectoral collaboration;
- to sensitize the Municipal Council and raise its ability to perform a wide range of functions to enhance quality of life.

The elements of Urban HEART already in the process of implementation include:

Provision of sound evidence. Lack of existing data or indicators on health determinants for the pilot area necessitated the need to conduct a baseline assessment. A baseline urban health equity assessment was therefore conducted to provide the relevant unavailable data on urban health indicators. The survey sought to analyse the differences in health opportunities between residents of Langa Langa and Rhonda civic wards, with a view to identifying viable and effective strategies that could be used to reduce health inequities in the municipality.

Intersectoral action for health. A number of intersectoral partnerships were forged during sensitization meetings. The elements and importance of Urban HEART were discussed in these meetings. The way forward is to strengthen these partnerships through a task force, which was formed during the debriefing of this evaluation. This task force is now in place and will strengthen the implementation of Urban HEART in Nakuru Municipality.

Community participation. The issue of community involvement and participation has been emphasized and practised in other municipality plans and projects, as observed from discussions with the city director of planning and the director of environment. However, this is yet to be conceptualized and actualized in the Urban HEART implementation process, as confirmed by the municipality chief public health officer.

The pre-assessment was facilitated by WHO through engagement of a consultant who guided the whole process, including an inception workshop, field surveys, consultations with municipality officials, assessment logistical arrangements and report preparation. The Municipal Council of Nakuru Department of Public Health provided organizational support in undertaking the exercise. This evaluation, however, was not able to explicitly ascertain the financial resources applied to the pilot implementation.

3.2 Processes, structures and mechanisms for implementation

The Urban HEART pilot implementation in Nakuru Municipality involved a number of steps. First, a consultant was hired by WHO to facilitate adoption of Urban HEART, and assess, analyse and report the results.

Two sensitization workshops were held to communicate the Urban HEART concept and agree on the pilot sites. Langa Langa and Rhonda wards were agreed on as pilot sites after lengthy deliberations in the workshops. The criteria used in selecting the two sites were the differences in socioeconomic status of the two wards and their geographical proximity. During the two pre-field sensitization workshops with stakeholders, the elements of Urban HEART were introduced. The Urban HEART introduction meeting was attended by councillors representing various Municipal Council of Nakuru wards, the government chief public health officer, the chief public health officer of the Municipal Council of Nakuru, officers from various government ministries, WHO representatives, Urban HEART pilot data collectors, and other Municipal Council officers.

After the sensitization workshops, assessment of the pilot sites was carried out. The survey was coordinated by the chief public health officer with the support of two officers from the municipality.

3.3 Methodology adopted during the assessment

According to the assessment report, the methodology of the health equity assessment was as follows:

- The survey was carried out using a standard household survey questionnaire developed by the consultant in consultation with stakeholders during the stakeholders' workshop.
- Fifty plot IDs were randomly selected from the 1300 plots in Langa Langa and from the 2099 in Rhonda ward. All households from 48 of the 50 plots selected were surveyed.
- The survey was carried out within five days by a team of four research assistants from Egerton University and Moi University.
- The collected data were entered and analysed in SPSS and MS Excel to provide insights into urban health inequities in the two study areas. An Urban Health Equity Matrix for the two pilot sites was constructed.
- A draft survey report was written and shared in a validation workshop. Issues in the report were deliberated upon and corrections suggested.

The final report has now been shared and a task force for implementation of the response part of Urban HEART is now in place (comprising eight members). Members of the task force include the chief public health officer of the Municipal Council of Nakuru (chair of the task force); the deputy district public health officer (also representing the Ministry of Health); a municipal public health officer (secretary to the task force); and representatives of the Solid Waste Management Department, Engineering Department, Directorate of City Planning, the

education and social sector, and the water sector. The task force was selected on the basis of the key priorities identified through the process of Urban HEART.

3.4 Review of data generated for the health equity assessment

In order to assess health equity and develop appropriate response strategies in the pilot sites for Urban HEART in Nakuru Municipality, four policy domains of Urban HEART were examined by the implementation team: physical environment and infrastructure, social and human development, economics, and governance.

The scope of assessment was decided upon in respect to available data, resources in terms of time, staff and finances, and organizational capacity. The consulting partner collected information and evidence through discussion and interviews with key municipal and national government officials in the health sector, social services and engineering departments. Analysis of policy documents was conducted through a review of secondary data.

The main objective was to assess performance on a given indicator over time compared to the national performance, which was used as the benchmark. This is important in the implementation of Urban HEART at the local authority level, as it informs the officials and staff of their performance. It also guides their decisions and actions on health and its determinants.

The workplan was developed with the support of the Urban HEART implementation team to guide allotment of responsibilities to various departments for gathering the information. Based on the premise that the effectiveness of the assessment, using the Matrix and Monitor as applied in Urban HEART to identify key equity problems, is dependent upon the quality of the data input, it was important for this evaluation to assess the quality of data that were used in the piloting. The evaluation considered two factors: selection of the most reliable data and the validity of the data.

Selection of reliable data was through routine information systems, especially on health outcomes. Policy documents, such as the Kenya Demographic and Health Survey report of 2008–2009 (*5*) and the Nakuru District Development Plan for 2008–2010, were reviewed. The community-based health information system was also reviewed at the Rhonda site, which was important for comparison at the neighbourhood level. Langa Langa, however, did not have the same initiative due to differences at the socioeconomic level (Langa Langa is well structured compared to Rhonda, which is predominantly a slum area).

Validation of data was done to determine whether data were within their specified range using appropriate measures, for instance immunization status as a percentage, infant and child mortality rates as a ratio per 1000 live births and maternal mortality rates per 100 000 live births. Denominators and numerators were also appropriately determined.

The main objective of ensuring reliability and validity of data is to have the best-quality data presented in a format to inform stakeholders on the key results of the assessment. The Matrix and Monitor in Urban HEART provide simple formats to enable a broad variety of stakeholders to identify health equity problems using Urban HEART.

The consulting team developed an inventory of available data sources using the tool attached in annex I. The tool was used in gathering data from routine information systems.

High-quality data are necessary for constructing a health inequity profile of a town as a basis for decision-making. Furthermore, disaggregation of indicators into socioeconomic groups, and geographical areas or neighbourhoods, is crucial because governments and local leaders who want to reduce urban health inequities must know which city dwellers are more affected by which health issues.

This section therefore seeks to provide an independent review of the data generated and alternative sources of data available for monitoring Urban HEART in terms of their availability, validity, reliability and completeness.

A total of eleven indicators were generated for guiding the health equity response. Of the eleven indicators, nine were disaggregated by the two geographical locations of the pilot implementation sites and two were only obtained at the national level (percentage of spending dedicated to health and education and proportion of 1-year-olds immunized against measles). These indicators fall in four broad Urban HEART policy domains.

1. **Physical environment and infrastructure.** Four indicators were captured during the assessment, namely access to water, access to improved sanitation, households with waste collection services, and percentage of households using liquefied petroleum gas (LPG) or electric energy.
2. **Social and human development.** Under this domain, only one indicator (literacy rate) was captured.
3. **Economics.** This domain had three indicators: employment, percentage of women earning an income, and proportion of households with income-generating activities.
4. **Governance.** This domain had two indicators, which were voter participation rate and percentage of government spending on health and education.

The emphasis on the use of disaggregated data facilitates identification of possible areas for focused interventions geared towards reducing inequities within localities and among various social groups.

It is worth noting that though the available information is only disaggregated by the two pilot sites and some of it does not measure to the standard Urban HEART indicator definitions, the "best available evidence" is a better alternative than not using any evidence in decision-making. Therefore, as it is, it can still be utilized in planning and prioritizing Nakuru Municipality interventions, particularly for Langa Langa and Rhonda.

Table 1 gives a summary of indicators developed from data gathered during Urban HEART assessment disaggregated by the two pilot sites, Langa Langa and Rhonda. The colour coding for the indicators is based on the indicator's performance in relation to the national urban average. Indicators performing at the same level or above the national average are given a green colour. Those performing slightly below the national average (up to 10 percentage points lower) are given a yellow colour. Indicators performing worse than 10 percentage

points below the national average or below 40% where national data are non-existent are given a red colour.

Table 1. Urban HEART indicator matrix for Nakuru Municipality

(Summary of indicators developed from data gathered during Urban HEART assessment disaggregated by ward)

Domain	Indicator	Wards	
		Langa Langa	Rhonda
Physical environment and infrastructure	Access to water	75%	4%
	Access to improved sanitation	98%	90%
	Households with waste collection services	90%	27%
	Percentage of households using LPG or electric energy	42%	8%
Social and human development	Literacy rate	96%	85%
Economics	Employment	29%	15%
	Percentage of women earning an income	48%	35%
	Proportion of households with income-generating activities	40%	27%
Governance	Voter participation rate	77%	77%

Source: Nakuru Municipality Urban HEART pilot assessment report.

Table 2 gives a comprehensive set of indicators that would have been considered for inclusion in Nakuru Urban HEART pilot assessment. While great effort was made to generate indicators for measuring equity within the health determinants as outlined by the Urban HEART indicator guide, the health outcome indicators were omitted. From key

informant interviews with the health assessment team it was observed that it was difficult to obtain data for measuring some indicators, especially the health outcome indicators. Capacity for computing some of the health outcome indicators, such as mortality rates and life expectancy, was also lacking. While there was intersectoral collaboration during the Urban HEART pilot pre-assessment stakeholder meetings, the actual assessment was mainly carried out by a consultant and the Municipal Council Department of Public Health.

Table 2. Comparison of generated Urban HEART indicators, aggregate municipality indicators and national indicators, and presentation of existing gaps

Domain	Indicator	National	Nakuru District	Langa Langa	Rhonda
Health outcomes	1. Life expectancy at birth (years)	T: 60; M: 58; F: 62 *WHO 2009*	T: 55.6; M: 52.9; F: 58.2 *NDDP 2008–10*	-	-
	2. Under-1 mortality (per 1000 live births)	U: 63; R: 58; T: 52; M: 65; F: 53 *KDHS 2008–09*	42 *NDDP 2008–10*	-	-
	3. Under-5 mortality (per 1000 live births)	U: 74; R: 86; T: 90; M: 77; F: 74 *KDHS 2008–09*	84 *NDDP 2008–10*	-	-
	4. Under-5 treated for malaria (%)	23 *KDHS 2008–09*	59 *DHRIO 2010*	-	-
Physical environment and infrastructure	5. Access to water (% households)	U: 89.3; R: 53.8; T: 63.0 *KDHS 2008–09*	57.7 *NDDP 2008–10*	75	4
	6. Access to improved sanitation (% households)	U: 29.8; R: 20.1; T: 22.6 *KDHS 2008–09*	73.7 *2009 Census*	98	90
	7. Households with waste collection services (%)	-	-	90	27
	8. Households using LPG or electric energy (%)	U: 65.6; R: 8.1; T: 23.0 *KDHS 2008–09*	55.8 *2009 Census*	42	8
	9. Households using solid fuel (wood, charcoal, paper, etc.) (%)	U: 48; R: 95.6; T: 83.3 *KDHS 2008–09*	80 *NDDP 2008–10*	52	84
Social and human development	10. Literacy rate (%)	M: 93; F: 86; T: 89.5 *KDHS 2008–09*	M: 76; F: 71; T: 73.5 *NDDP 2008–10*	96	85
	11. Births attended by skilled	U; R; T	54	-	39.7

Domain	Indicator	National			Nakuru District			Langa Langa	Rhonda
	personnel (%)	74.8	36.8	43.8					
		KDHS 2008–09			*DHRIO 2010*				*CBHIS*
	12. Children age 12–23 months fully immunized (%)	U	R	T	82			-	98.8
		80.9	76.3	77.4					
		KDHS 2008–09			*NDDP 2008–10*				*CBHIS*
	13. Under-5 underweight (%)	M	F	T	-			-	-
		20.7	19.8	20.3					
	14. Prevalence of teenage pregnancies (%)	10.1			-			-	12.5
		World Bank 2009							*CBHIS*
	15. HIV prevalence (%)	M	F	T	5			-	-
		8.0	4.3	6.3	*NDDP 2008–10*				
	16. Prevalence of tobacco smoking (men %)	21.7			-			-	-
Economics	17. Employment rate (%)	M	F	T	M	F	T	29	15
		87.1	56.6	71.9	54.9	38	46.5		
		KDHS 2008–09			*2009 census*				
	18. Percentage of women earning an income (%)	-			-			48	35
	19. Proportion of household with income-generating activities (%)	-			-			40	27
	20. Absolute poverty (%)	45.9			U	R	T	-	-
					50	34	44		
		World Bank 2009							
Governance	21. Voter participation rate (%)	-			-			77	77
	22. Budget allocated to health (%)	7.0			13.7			-	-
		GTZ 2009 (*6*)			*Municipal Planning Department*				

Key: U = urban, R = rural, T = total, M = male, F = female.

KDHS = Kenya Demographic and Health Survey, NDDP = Nakuru District Development Plan, WHO = World Health Organization, DHRIO = District Health Records & Information Office, CBHIS = Community-Based Health Information System.

3.5 Intersectoral actions generated or strengthened by the process

A WHO Urbanization and Health Fact Sheet (*7*) outlines intersectoral action on health as central to the achievement of equity in health. This is because its progress depends upon decisions and actions in many sectors. The objective of intersectoral action is to achieve greater awareness of the health and health equity consequences of policy decisions and organizational practice in different sectors, and through this, to move in the direction of healthy public policy and practice across sectors.

Sound urban health governance is a combined effort of a multitude of actors, including different levels of government, nongovernmental organizations, the private sector and the community. In the best-managed cities, local governments take a leadership role in combining the talents and powers of all sectors (*8*).

The evaluation sought to assess intersectoral actions generated or strengthened by the Urban HEART implementation process through key informant interviews and focus group discussions. This section presents a more in-depth treatment of the responses, as presented below.

All Municipal Council officers interviewed articulated a clear understanding of the importance of intersectoral collaboration as a prerequisite for effective action against health inequities.

As observed during an in-depth interview with the chief public health officer of the Municipal Council of Nakuru, during pre-assessment, assessment and presentation of findings, intersectoral collaboration in piloting Urban HEART was emphasized. Participants in the stakeholder meetings for pre-assessment and findings presentation were drawn from the national government and local government. The participants included representatives from the Municipal Council housing, education, health, engineering, water, environment and planning departments. All the key council departments were represented, according the chief public health officer.

A similar sentiment was expressed during a focus group discussion with the community health extension workers. One participant, the deputy district public health officer and representative of the Ministry of Health, reiterated that in the first and second stakeholder meetings held in preparation for Urban HEART, officers from different departments and councillors were invited. Deliberations on Urban HEART were made in these meetings and consensus sought. One of the key issues discussed was the choice of the wards for piloting Urban HEART.

3.6 Implementation issues: facilitating and hindering factors

Facilitating factors

A number of factors facilitated successful piloting of Urban HEART and spearheading of actions to reduce health inequities in Nakuru Municipality.

Views gathered from key informant interviews with the Urban HEART implementation team led by the Municipal Council chief public health officer point to the fact that during the inception workshops, Urban HEART received support from the councillors who attended. It also received wide acceptance from participants during these meetings.

Similar sentiments were captured during a focus group discussion with community health extension workers. Asked about participants' reception of the Urban HEART concept during pre-assessment, one of the participants who had attended the workshops said: "In the initial stages the same people were really worried about what Urban HEART was and didn't want

it; later on they were convinced and they accepted the concept and sat down and went through the concept and discussions, and at the end they accepted."

The chief public health officer, in an interview, said: "The Urban HEART concept was well understood and received by the local government. There was a wide acceptance in the meetings." The municipal works officer also expressed support for this viewpoint: "The concept was well understood and received wide acceptance in the meeting."

Another facilitative factor emerging from the focus group discussion with community health extension workers was availability of skilled staff that could oversee implementation of Urban HEART. One participant said: "Availability of able officers to handle Urban HEART will help since it shows the position of the intervention because you know where you are."

Availability of the assessment findings in the form of a report was also observed to be a pivotal facilitating factor for the implementation of Urban HEART. As the chief public health officer said: "Now that the Urban HEART baseline assessment report is available, we don't see the reason why it cannot be implemented."

Intersectoral collaboration emerged as the key pillar to the successful implementation of Urban HEART. In virtually all key informant interviews and focus group discussions conducted, participants demonstrated the need for strong intersectoral collaboration for an effective Urban HEART implementation to be realized. The Municipal Council director of environment suggested the need to have an all-inclusive committee to steer the Urban HEART implementation workplan, and meetings to share progress: "The existing collaborations on various projects within the council provide an opportunity for the formation of an Urban HEART steering committee." Commenting on the subject of intersectoral collaboration, the chief of Kaptembwo location said: "Leaders meet and deliberate and provide proposals on where to intervene and prioritize projects according to the needs of the people." This was a positive attitude in the adoption of Urban HEART at the local community level that needs to be tapped.

The municipality Planning Department has adopted a number of approaches similar to those of Urban HEART. For instance, priorities are set in planning meetings and interventions based on these. When it comes to the use of local authority transfer funds, priorities are set using a participatory approach. Some of the completed or ongoing projects under that source of funding include school bursary allocations and the Kazi kwa Vijana ("work for young people") Initiative. The choice of beneficiaries in these projects is purely based on their socioeconomic status.

Other projects whose allocation has been done on a priority basis include the World Bank-funded Urban Lighting Project under the Kenya Municipal Programme (80% of floodlights put up in slums), Rhonda dispensary maternity wing construction (started in 2010 after consultations with the Public Health Office), storm water treatment (a short-term World Bank project), non-motorized transport, solid waste management (using a refuse truck bought for Ksh 10 million), and disaster management and prevention facilities. In all these projects, stakeholders (under the Kenya Municipal Programme) are given leeway to select location and priorities of programmes. To minimize health problems arising from contamination, the

municipality planning unit is compelling landlords to ensure decent housing with septic tanks to ensure safe disposal of human waste.

Hindering factors

This section outlines some of the aspects that undermined successful implementation of the Urban HEART piloting in Nakuru Municipality. According to the chief public health officer, the key factor that undermined the successful implementation of the Urban HEART pilot in Nakuru was the expectations of the implementation teams. The initial thinking was that WHO would support interventions based on the findings of a scoping paper on social determinants of health. “They wanted the Municipal Council of Nakuru to be a research site, and then situations changed,” he said. The failure of the implementation of the findings of the scoping paper demoralized the technical team.

Participants also cited lack of implementation resources as a hindering factor. There was monetary expectation from the implementation team. Perhaps having been the custodians of the scoping paper, which was accompanied by funding promises, the implementation team had high expectations of receiving dedicated funds for Urban HEART pilot implementation from WHO.

Moreover, lack of advocacy contributed to slow implementation progress of the Urban HEART project. Discussions generated little evidence of advocacy during the project pilot implementation phases. Some advocacy was however done during the early stages, for example during organization of pre-field stakeholder meetings and sharing of baseline survey findings.

Additionally, participants cited lack of discussions and agreement with the consultant (APW holder), particularly regarding remuneration for their support. “There was inadequate participatory approach during the assessment phase,” said the chief public health officer. “Some issues were not agreed between the organization and the consultant,” echoed the municipality information officer.

No clear timelines and way forward were set by the consultant, according to the implementation team. As a result the implementation team kept waiting for a communication from the consultant, including submission of the final report, for the response to start. “The time when the consultant should have completed his assignment and the chief public health officer of the Municipal Council of Nakuru took over was not clearly spelt out and the final report did not come in time, ” said the chief public health officer. The municipal works officer added: “I never got the final report in appropriate form to be given to shareholders.”

It was also observed from discussions that despite the Nakuru Municipality Urban HEART pilot having received acceptance and support by councillors during the inception workshops, it has not been officially sanctioned in a full council seating. It is only through full council endorsement that Urban HEART will gain wider acceptance, support and serious commitment by the councillors who are the policy agents of the municipality.

The hindering factors can be summarized as follows:

- Lack of commitment from the Municipal Council of Nakuru to make the Urban HEART pilot one of the agenda items for development in terms of allocating budget for its implementation, despite having accepted it as an important tool at the council level. No resources were provided for the implementation of the pilot.
- Inadequate advocacy on the part of the Urban HEART implementation team through development of a steering committee composed of various stakeholders, which would have been the driving force.
- Lack of a roadmap for implementation after the inception workshop, for example a workplan to guide implementation of the Urban HEART pilot in the two sites.
- Non-involvement of the communities in the targeted sites of Rhonda and Langa Langa. Such involvement could have resulted in the formation of organized community groups with a specific agenda on Urban HEART.
- Lack of reliable routine data, which was attributed to weaknesses in surveillance and information systems at the Municipal Council level.
- Criteria to prioritize specific interventions or actions were not developed and therefore there was no implementation of the response phase.

3.7 Accomplishments of the project and response

Accomplishments

Discussions with key informants revealed that despite the slow progress, the Nakuru Municipality Urban HEART pilot meetings did bear some fruit. There is evidence of direct effect of Urban HEART meetings on the policy- and decision-making process within the council.

Observations by the councillor from Langa Langa ward illustrate what knowledge of Urban HEART can achieve. To the councillor, Urban HEART meetings were an eye-opener. Before the introduction of this concept, he was doing things his own way without proper consideration of the wider picture. Through Urban HEART meetings he is now able to prioritize development issues on the basis of equity – what do the residents of Langa Langa need most? After Urban HEART pilot orientation, the councillor no longer makes decisions without consulting. He brings all stakeholders on board and frequently consults to ensure that correct decisions are made. “Due to what I learnt during the Urban HEART workshop, people had to prepare an action plan (2009–2012) for my ward and a small team was created for action planning comprising professionals within the ward; engineer, doctor, teacher and environmentalist,” said the councillor.

According to the councillor, the objectives of Urban HEART have assisted the council in improving Langa Langa ward and indicating how to programme in terms of health, infrastructure and other areas. For instance, the councillor used Nakuru Urban HEART findings to convince the Constituency Development Fund Committee to consider putting up Ksh 13 million to finance a general ward at Langa Langa health centre, in Free Area estate. In

addition, he said, the councillor of Rhonda ward took the initiative to urge development of a dispensary at Rhonda with a maternity wing.

Another project whose start was motivated by insights from Urban HEART was the reconstruction of blocked drainage systems in Langa Langa using the Kazi kwa Vijana initiative. This is a government youth employment initiative whereby unemployed young people are given short menial work contracts to work on government projects within the area.

To address security issues in Langa Langa, the council has put up a police post at the flamingo farm (from 2009) and has come up with the concept of constructing gates to close unauthorized routes. Additionally, the council has embarked on a street lighting programme for Langa Langa on order to improve security.

Response

A task force for implementation of the response part of Urban HEART is now in place, comprising eight members drawn from various Municipal Council of Nakuru departments with an option of coopting other stakeholders. The task force need to adopt a wider sectoral approach in the implementation of the response phase of Urban HEART. This will facilitate resource mobilization to support specific interventions that were prioritized during the assessment phase.

In a stakeholder feedback workshop held on 4 November 2011, which was presided over by the deputy mayor of the Municipal Council of Nakuru and attended by the chair of the Health Committee of the Municipal Council, it was resolved that the council would support the URBAN HEART project to realize its objectives.

The deputy mayor emphasized that the task force should fast-track the process by developing a budget proposal to support Urban HEART, which would be forwarded to the Finance Committee for inclusion in the annual budget. The deputy mayor reiterated the significance of having workplans for each component of the Urban HEART Project, for presentation to the full council meeting. This is a confirmation of local authority reawakening and support for Urban HEART.

4. Discussion

Urban HEART is based on the social determinants of health approach, which has been developed to respond to the increasing demands of urban health. Due to rapid urbanization worldwide, the gap between advantaged and disadvantaged groups in cities is widening, particularly in developing countries.

Establishment of equity in health starts with the recognition and demonstration of health inequalities, that is, differences in health and its determinants between localities and social groups. Urban HEART has adopted a social determinants of health approach to demonstrate health gaps between localities and cities. Displaying differences between localities is a prerequisite for raising awareness and commitment at various levels of the power hierarchy to respond to health inequalities and direct resources towards reducing the gaps.

According to the Nakuru Municipality Urban HEART pilot project, the targeted areas of Langa Langa and Rhoda demonstrated gaps in terms of infrastructure development. Langa Langa ward is well planned as opposed to the unplanned habitation observed in the Rhonda site. This in itself is a determinant of inequity in health. The assessment results obtained in the policy domains of physical environment and infrastructure in the two piloted areas showed a huge contrast between the two sites, especially in terms of accessibility to water, improved sanitation and solid waste management.

Key informant interview results showed that it was difficult to obtain data for measuring some indicators in the two sites, especially the health outcome indicators, such as under-5 mortality rates, life expectancy and disease-specific mortality rates. This is attributed to the fact that there is no capacity for computing some of these health outcome indicators.

Routine data were found to be incomplete and of low quality, thus being of little use for undertaking research or addressing the needs of policy-makers for robust data to help direct resources towards reduction of health inequalities among the populations in the targeted sites. Although at the Rhonda chief's office there is a community chalk board for recording and monitoring health indicators at the community level, there remains the need to analyse the raw data generated.

The Urban HEART pilot team in Nakuru planned for two major components: assessment and response. The assessment was completed and a draft report was made available. However, more needs to be done on the response component, as there was minimal evidence of relevant policy-making at the council level by endorsing relevant by-laws or regulations to respond to the gaps in health and its determinants identified in the two pilot sites.

Intersectoral collaboration, specifically for those activities that extend beyond the health sector, is necessary to alleviate health determinant inequalities. Coordinated actions by community and nongovernmental organizations in the form of community-based initiatives were not observed, apart from one that was licensed by the council to collect garbage; however, its relation to the Nakuru Municipality Urban HEART pilot implementation is not known.

It is important to note that participants in civil society organizations can influence the health of urban populations. Community-based organizations, such as neighbourhood associations and tenant groups, can mobilize populations and resources. In addition, churches and faith-based organizations offer social support, safe space, and political leadership. Organizations representing residents of slums, poor people or marginalized groups can bring new voices into the political arena and mobilize resources for improved living conditions. The Urban HEART pilot shows the need for Nakuru Municipality to build community and civil society participation into its approach.

The significance of this approach is that the communities are likely to prioritize those interventions (with regard to the social determinants of health) that they are able to solve themselves with minimum assistance from government, such as solid waste management and social services improvement, and those that need technical and financial assistance from the Municipal Council, such as water supply and major roads. Health determinants that cut across all communities can be identified and incorporated into ward-level plans. At the end of the pilot, it was expected that each ward would have an upgrading proposal and plan.

In conclusion, the Urban HEART pilot was supported at the assessment stage but not at the response stage by the Municipal Council of Nakuru. This could be due to limited advocacy strategies and misconception of the role of WHO at the inception of the project. This needs to be addressed so as to achieve the overall goal of Urban HEART in reducing health inequities in cities.

5. Recommendations to improve and scale up implementation of Urban HEART

The recommendations provided below are based on the discussions, observations and reviews carried out during Urban HEART evaluation.

1. The evaluation team recommends wider sharing of the Urban HEART Municipal Council of Nakuru assessment report among stakeholders. In line with this, there is a need to scale up Urban HEART advocacy to make the tool familiar to the entire municipality community. This may be achieved using billboards, posters, local radio adverts, and other promotional techniques.
2. There is a need to strengthen intersectoral collaboration by bringing together different actors (central government officers, local government officers, local administration, civil society, nongovernmental organizations and representatives from the community). This will strengthen the formation of advocacy and coordination networks that involve other stakeholders in the implementation of Urban HEART.
3. The Municipal Council of Nakuru should conduct training and awareness raising among stakeholders of Urban HEART. This will assist departmental heads and officials to develop better intersectoral collaboration and communication strategies to address the various determinants of health.
4. The Urban HEART implementation team should develop strategies of communication and reinforce skill building among the populations in the piloted sites. This calls for further training on the response component of Urban HEART, which was found to be low during this evaluation exercise.
5. The Municipal Council should strive to provide an enabling environment for community and other stakeholders to participate in all phases of Urban HEART: preparation, project formulation and implementation. Further, the municipal authorities should strive to build partnerships with these stakeholders.
6. The Urban HEART implementation team should develop an advocacy plan to champion the response proposal to decision-makers.
7. The Urban HEART implementation team should undertake the response phase not only as good practice but also to pursue a national agenda for healthy urbanization, as most people are now living in the urban areas. This is important for confronting challenges and opportunities as a result of urbanization and may lead to protecting and promoting health for all. This would open a window to address other broad determinants of health that cut across all levels of governance. It will also promote equity and prevent further inequitable growth.
8. The Municipal Council of Nakuru should consider privatizing some aspects of service provision and play a greater role in facilitating these private initiatives.
9. The Municipal Council needs to strengthen the data collection and validation mechanisms for effective implementation of Urban HEART in the piloted areas. For

instance, there is likelihood of underreporting in maternal mortality, road traffic injury and tobacco smoking, which were not captured during this evaluation.

10. There is a need, therefore, for the Urban HEART implementation team to complete the Urban Health Equity Matrix and performance Monitor based on the assessment survey results in order to inform decision-makers. This will enable a better understanding of priority equity gaps in the two targeted sites of Rhonda and Langa Langa.

11. The Urban HEART implementation team should consult widely to identify specific local health equity concerns of the decision-makers and affected community for a better understanding.

12. There is a need to consider the benefits of involving local communities in plan formulation and implementation processes. This involvement may come in the form of the private sector, nongovernmental organizations, community-based organizations and individual citizens in various stages of planning, decision-making and plan implementation. Participatory planning will not only improve the quality of plans, but also improve acceptability of such plans by all stakeholders, and hence the effectiveness of proposals and action plans to roll out Urban HEART in other cities in Kenya.

13. The concept of community participation needs to be enforced and actualized within the Urban HEART process. Various neighbourhoods have community-based movements articulating various development concerns, such as income-generating activities. They may be in a position to identify interventions that are a priority or acceptable to their local communities and may propose resources they could volunteer.

14. There is a need for the Urban HEART pilot team to strengthen community participation in the two pilot sites by promoting the formation of registered community development committees as community-based organizations for sustainability of interventions.

15. As it was found out during this evaluation that the response phase had not been implemented, there is a need for the Urban HEART implementation team to consider establishing small subteams to focus on specific policy domains. This approach may speed up activities and capitalize on the experiences of other team members.

16. Documentation of the process is key for any reference of status of implementation. In the case of the Urban HEART pilot of Nakuru Municipality, it appeared there was no such documentation apart from the assessment report, which had not been shared widely.

6. Conclusion

In conclusion, the evaluation identifies the key achievements of Nakuru Municipality Urban HEART pilot as the following: stakeholder engagement during mobilization meetings and choice of pilot sites; implementation of the health equity assessment in the two identified pilot sites within the municipality (Rhonda and Langa Langa); involvement of key stakeholders in the validation of the study findings; presentation of the final assessment report to inform response; and formation of a task force for the implementation of the Urban HEART response phase.

To actualize response, the task force has to emphasize the need for the endorsement of the Urban HEART concept in a full council meeting. This should be followed by drafting of a response implementation plan by the response task force and sharing this in a stakeholder workshop for vetting and approval. Additionally, there is a need to focus on stakeholder mobilization and intensive advocacy of the Urban HEART concept to make it popular among the key stakeholders within the municipality and the communities residing within the pilot sites. Intersectoral collaboration and community involvement would be key during the implementation of the response. The results of feedback from the stakeholder workshop showed that there is goodwill on the part of the Municipal Council of Nakuru, as the deputy mayor presided over the event and committed herself to presenting Urban HEART implementation to the full council meeting as an agenda item.

Finally, all processes should be monitored and documented. This could be achieved through formation of an Urban HEART monitoring and evaluation framework.

Annex A. Evaluation team

	Name	Designation	Task
1	Franklin Okonji	Consultant	Evaluation
2	Felix Mulama	Consultant	Evaluation
3	Hawa Senkoro	WHO Regional Adviser, Urban Health Governance	Observation & technical support
4	Wilfred Ndegwa	National Programme Officer, WHO Kenya Country Office	Observation & technical support
5	Stephen Kimani	Chief Public Health Officer, Municipal Council of Nakuru	Facilitation
6	Samuel Nyakambi	Public Health Officer, Municipal Council of Nakuru	Facilitation
7	Solomon Mbugua	Information Officer, Municipal Council of Nakuru	Facilitation

Annex B. Interviews carried out

Key informant interviews		
	Name	**Designation**
1	Charles Maisiba	Councillor, Langa Langa
2	Peter Keter	Director of Planning, Municipal Council of Nakuru
3	Stephen Kimani	Chief Public Health Officer, Municipal Council of Nakuru
4	Solomon Mbugua	Information Officer, Municipal Council of Nakuru
5	Samuel Nyakambi	Public Health Officer, Municipal Council of Nakuru
6	Kipkemoi Koech	Chief, Kaptembwo location
7	Kirui	Assistant Chief, Kaptembwo sublocation
8	Joel Barno	Manager, St Josephs refuse collection community-based organization
9	P.M. Ngunjiri	Works Officer, Municipal Council of Nakuru
10	Sammy Ngige	Director of Environment, Municipal Council of Nakuru
11	James Kamau	Officer for Solid Waste Management, Municipal Council of Nakuru
Focus group discussion with community health extension workers		
1	Claris Wachira	Public Health Officer, Kaptembwo Health Unit
2	Fancy Rono	Nursing Officer, Kapkures Health Centre
3	Winfrida Mouko	Public Health Officer, Rhonda Health Unit
4	Vhanice Kwamboka	Deputy District Public Health Officer, Nakuru District

Annex C. Officers visited for data validation

Collection of data for validation (offices visited)
1. District Public Health Records and Information Officer
2. District Registrar of Births
3. District Population Officer
4. Provincial/District Statistical Officer
5. District Development Officer
6. NAWASSCO

Annex D. Debriefing meeting

Participants		
	Name	**Designation**
1	Felix Mulama	Consultant
2	Hawa Senkoro	WHO Regional Adviser, Urban Health Governance
3	Stephen Kimani	Chief Public Health Officer, Municipal Council of Nakuru
4	Samuel Nyakambi	Public Health Officer, Municipal Council of Nakuru
5	James Kamau	Waste Management Officer, Municipal Council of Nakuru
6	Fancy C. Rono	Nursing Officer, Kaptembwo
7	Winfrida Mouka	Public Health Officer, Rhonda
8	P.M. Ngunjiri	Works Officer, Municipal Council of Nakuru
9	Waititu Paul	Public Health Officer, Municipal Council of Nakuru
10	Claris Wachira	Public Health Officer, Kaptembwo
11	Vhanice Kwamboka	District Deputy Public Health Officer, Nakuru District

Annex E. Photo-documentation

Photo-documentation

Preparatory meetings

1. Preparatory discussions in public health officer's office

2. Preparatory discussions at the municipality public health meeting room

Key informant interviews

3. Interview with Charles Mwaisiba, councillor, Rhonda ward

4. Interview with Peter Keter, municipality director of planning

5. Interview with Stephen Kimani, municipality chief public health officer

6. Interview with Kipkemoi Koech, chief, Kaptembwo location

Photo-documentation

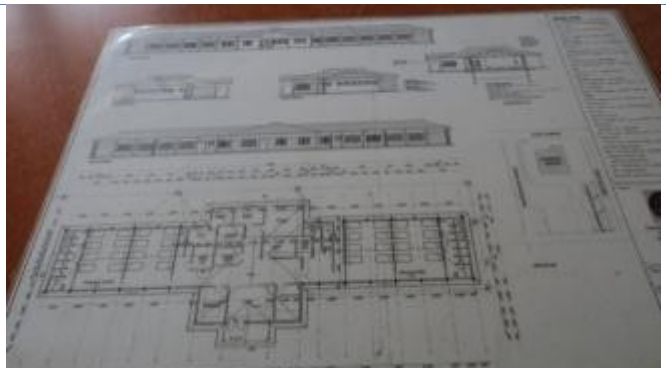
Focus group discussion

7. Focus group discussion with community health extension workers

8. Focus group discussion with community health extension workers

Projects indirectly associated with Urban HEART

9. Langa Langa health centre general ward under construction



10. Plan for Langa Langa health centre general ward

11. Langa Langa street lighting project

12. Rhonda dispensary under construction

Photo-documentation

Debriefing meeting

13. Debriefing meeting

14. Debriefing meeting

Photo-documentation during feedback workshop, 4 November 2011

15. Deputy mayor Ms D. Mbuthia giving keynote address

16. Participants at the Municipal Council committee room

17. Participants at the Municipal Council committee room

18. Councillor Ouma, chair of Public Health Committee

Annex F. Attendance list for Urban HEART pilot pre-field stakeholder workshop

Urban HEART SENSITIZATION WORKSHOP REGISTRATION FORM. DATE.....28/01/2009.....

	NAME	DEPARTMENT/WARD	CONTACT/TELEPHONE	SIGNATURE
1.	Stephen Kimani	Public Health	0722564542	
2	PETER M. NGUNJIRI	M. E	0721300517	
3	Mary .M. Gikunju Mrs	PHO	0722686870	
4	Samuel . N. Nyakambi	P.H.	0721862676	
5	Kimaru Lawrence	Y O	0720290153	
6	Vhamere Kwamboka	Public health	0713826223/0733520044	
7	Richard Maingangi	Town Planning	0721587676	
8	Tom Kyalo	MCH	0720253357	
9	Sammy Ngeiye	Kg. Doc	0712-195920	
10	Cllr. Samuel Arm	M.C.N.	0722549601	
11	Edwards Gichana	D/Treasurer	072--222143	
12	Cllr Wahaim Athuman	Cllr	0722728286	
13	Cllr Jeginther Mwenda	Cllr	0720787735	
14	Solomon Mbugua	T.C Nairobi	722279025	
15	Cllr Jama Ibrahim	Cllr MCN	0723456603	
16	Cllr Charles Mwinika	Cllr MCN	0721 551732	
17	Cllr Rose Lan	M CN	0722592733	
18	Pamela Otieno	MCN	0722827129	
19	Mumei Gladys	MCN	0726525647	
20	Cll GIBEH KASSIM	MCN	0720370708	
21	Cllr Rasha A Ouma	MCN	0721 316266	

	NAME	DEPARTMENT/WARD	CONTACT/TELEPHONE	SIGNATURE
22	Agnes Nkuraru	MCN	0716774555	
23	[illegible]	MOH	0721-269161	
24	William Ndegwa	WHO	0733953431	
25	Justus Nyaundi	Comoro	0721711900	
26	Abdirizak Ahmed	Town Clerk	0723405203	
27	Fredo Onsarigo	MoPHS	0726671522	
28	Festus Ondieki	MoH	0726895121	
29	Ibrahim Wasuli	ADN	0722446074	
30				

Annex G. List of attendees of feedback workshop

NAKURU MUNICIPALITY URBAN HEART EVALUATION AND DOCUMENTATION DEBRIEFING WORKSHOP ATTENDANCE LIST: FRIDAY NOVEMBER 4TH 2011

#	Name	Designation	Email	Signature
1.	RICHARD MOMANYI	ADII Town planning	0721587676	
2.	BENSON J. MWANGI	SNR ASS OFF. KNBS	0722363224 yahya1962@yaho	
3.	VHANCE KWAMBOXA	SNR PUBLIC H. OFFICER	vwhance@yaho.com	
4.	Stephen N. Kimani	CPHO - MCN	titi Kimani@yahoo.com	
5.	PETER M. NGUNJIRI	WORKS OFFICER	Potmanjiri@Yaho	
6.	SOLOMON MBUGUA	GIS Technician LV: Project	Smbugua@yahoo.com	
7.	Sammy K. Njuguna	D.D.D.E		
8.	MILLICENT YUMI	M.E.O.	Magayaga@yaho.com	
9.	Felix Mulama	Consultant Urban Heart	felixmulama@yahoo.com	
10.	Franklin Okonji	Consultant	franklinokonji@gmail.com	
11.	Samuel Nyakamba	PHO	Snyakamba@yahoo.com	
12.	Osano Pamela	DSSH - MCN	bambaukenya@yahoo.com	
13.	Damans Mbuthia	D/MAYOR	damambuthia@gmail.com	
14.	CHR RISPA A. OUMA	CHAIR LADY	Rispaouma@yahoo.com	
15.				

Annex H. Key informant and focus group discussion guide

Questionnaire for documenting and evaluating Urban HEART implementation

The World Health Organization (WHO) and the Kenya Ministry of Public Health and Sanitation, in collaboration with Nakuru Municipality stakeholders, are carrying out an evaluation and documentation for the Urban HEART pilot, which was implemented from 2009. The main objective of this evaluation is to assess the progress made, identify the successes, challenges and constraints, and suggest changes for achieving the overall project objectives.

The evaluation takes into consideration both facts and subjective assessments to determine (1) how well things were done (process evaluation); (2) the immediate effects, or outputs (output evaluation); and (3) the longer-term effects on health, health determinants and health equity (outcome and impact evaluation).

The documentation aims to describe how things were done and what resulted from it, based on facts.

I wish to make an assurance to you that all the information you are going to give me will be treated with confidentiality and will be used solely for this study.

I kindly ask for a short period of your time for interviewing. Do you consent to my request? Yes/No

Target groups for key informant interview and focus group discussion

Key stakeholders, project team members, government officials, beneficiaries etc.

Pre-assessment phase

Orientation of the pilot sites

What did the participants think of the orientation? Was it useful?

[Possible answers:

- Application of Urban HEART will have several outcomes for different parties, for instance a unique index for measuring inequalities for policy-makers; identifying current gaps and relations with other indices for public health practitioners; and empowering interested parties such as community-based organizations and council officials at Nakuru Municipality.
- Concepts and methodology for implementation of Urban HEART.
- Realization of systematic assessment of unfair conditions in the urban setting.
- Agreement on a set of indicators proposed by participants.
- Action plan developed (if any) by the participants for introducing Urban HEART in Nakuru Municipality.]

What was the composition of the participants during the orientation of the Urban HEART pilot?

[Representation of community organization groups, government sector and local authority officials.]

Goals of the Nakuru municipality Urban HEART pilot

What were the set goals of the Nakuru municipality Urban HEART pilot?

[Possible answers:

- Identify the differences between the health, health determinants and well-being of people living in disadvantaged urban areas and the general population.
- Determine appropriate, feasible, acceptable and cost-effective strategies, interventions and actions that should be utilized to reduce gaps between people living in the same municipality of Nakuru.
- Type of Urban HEART model in Nakuru municipality, designed based on policy domains: physical environment and infrastructure, social and human development, economics, governance.]

What were the expected achievements of the Urban HEART pilot in Nakuru Municipality?

[Possible answers:

- Improved health and social status of people living in urban poor or disadvantaged areas such as Rhonda and Langa Langa.
- Stimulating communities to mobilize and promote health and its equity determinants.
- Acknowledgement of the importance of social determinants of health in health equity.
- Promotion of intersectoral action to reduce inequity in health and development at the municipal council level.
- Appreciate comparable equity data and analysis.
- Priority interventions/response planned and implemented.]

Engagement of national and local government officials

How were the national and local government officials engaged in this process?

Organization of the local technical working group

How was the technical working group convened?

What were its organizational structure, mandate, membership, roles and responsibilities?

Was the group multisectoral?

Who were the key stakeholders?

Who was the most/least supportive of the project?

Resources used

What were the funds required, including breakdown by major components (e.g. meetings, materials)?

What was the staff time required, including breakdown by different skill sets (e.g. project manager, data analyst)?

How were the resources mobilized?

What is a realistic timeframe in which this phase can be completed in a similar context?

Facilitating factors

What were the things that facilitated this phase?

Hindering factors

What were the things that made this phase difficult?

Lessons learnt

Did the stakeholders think this phase went well? Why or why not?

What are the lessons learnt about completing this phase successfully?

Assessment phase

Stakeholder engagement

What was the mechanism to engage stakeholders in this phase?

How were community groups included in this phase?

What were the stakeholders' (including community) perceptions of being involved in this phase?

Indicator selection

How were the indicators selected? What were the key decision factors?

Data collection and validation

What were the data sources and data types used for each indicator?

How were the data collected and validated?

Were the data appropriate and accurate?

Urban health equity assessment (Matrix and Monitor)

How were the Matrix and Monitor created?

What did the resulting Matrix and Monitor look like?

Did the results match the impressions and expectations of different stakeholders?

Resources used

What were the funds required, including breakdown by major components (e.g. meetings, materials)?

What was the staff time required, including breakdown by different skill sets (e.g. project manager, data analyst)?

How were the resources mobilized?

What is a realistic timeframe in which this phase can be completed in a similar context?

How can the Urban HEART assessment component be improved? What other resources are needed?

Facilitating factors

What were the things that facilitated this phase?

Hindering factors

What were the things that made this phase difficult?

Lessons learnt

Did the stakeholders think this phase went well? Why or why not?

What are the lessons learnt about completing this phase successfully?

Response prioritization phase

Stakeholder engagement

What was the mechanism to engage stakeholders in this phase?

How were community groups included in this phase?

What were the stakeholders' (including community) perceptions of being involved in this phase?

Prioritization of health equity issues

What were the priority health equity issues, and why?

How were the Matrix and Monitor results used to prioritize health equity issues?

What other information or factors influenced the prioritization of health equity issues?

What did community members think of the prioritized health equity issues?

Prioritization of strategies and interventions

What were the priority strategies and interventions, and why?

How was Urban HEART used to identify and prioritize strategies and interventions?

What other information or factors influenced the prioritization of health equity issues?

What did community members think of the prioritized strategies and interventions?

Development of proposal or action plan

Was a proposal or action plan developed based on the Urban HEART implementation results?

How and to whom was the proposal or action plan presented?

Resources used

What were the funds required, including breakdown by major components (e.g. meetings, materials)?

What was the staff time required, including breakdown by different skill sets (e.g. project manager, data analyst)?

How were the resources mobilized?

What is a realistic timeframe in which this phase can be completed in a similar context?

How can the Urban HEART response component be improved? What other resources are needed?

Facilitating factors

What were the things that facilitated this phase?

Hindering factors

What were the things that made this phase difficult?

Lessons learnt

Did the stakeholders think this phase went well? Why or why not?

What are the lessons learnt about completing this phase successfully?

Policy development and programme implementation phase (if applicable)

Policy uptake and development

Was the proposal or action plan accepted or rejected, and by whom?

What were the key factors that influenced the decision?

What did the decision-makers think of Urban HEART?

[If it was accepted] How closely was the proposal or action plan followed?

Programme development and implementation

Was a programme or intervention developed and implemented?

What were the key factors that influenced the decision?

What was the programme or intervention? How closely was it linked to the proposal?

What did the stakeholders (including community) think of the programme or intervention?

Status of implementation

What is the project's current status?

Sustainability measures

Is Urban HEART implementation sustainable at this site?

Are there any mechanisms (legal, organizational, financial, etc.) in place to ensure sustainability of Urban HEART implementation?

What are the key sustainability factors?

Facilitating factors

What were the things that facilitated this phase?

Hindering factors

What were the things that made this phase difficult?

Lessons learnt

Did the stakeholders think this phase went well? Why or why not?

What are the lessons learnt about completing this phase successfully?

Impact and outcome evaluation

Monitoring and evaluation mechanisms

Have you been monitoring and evaluating the process? If so, how? If not, why?

What are the main accomplishments of the project?

What, if any, are the negative effects of the project?

Who has benefited the most or least from participating in the project?

Improvement in awareness and priority setting

How did the Urban HEART implementation increase awareness about health equity issues among stakeholders and in the community?

How did the Urban HEART implementation result in putting health equity issues higher on the agenda of local, regional or national governments and other agencies?

Scale-up of Urban HEART

Are there plans for scaling up Urban HEART implementation in the region or country?

Have other municipalities adopted or taken interest in Urban HEART?

Additional policies and programmes

How did the Urban HEART implementation generate or strengthen other policies or programmes beyond those directly resulting from the pilot project?

Intersectoral action on health

How did the Urban HEART implementation generate or strengthen intersectoral collaboration to address health and health equity issues?

How was the intersectoral collaboration viewed by participants?

Community participation

How did the Urban HEART implementation generate or strengthen community participation in the local planning process (health planning, urban planning)?

How was the community participation viewed by the participants?

Intervention outcomes on health and health equity

How did the programme or intervention generated by the Urban HEART project affect health, health determinants or health equity? What is the evidence of these effects or outcomes?

Annex I. Guide for documentation of locally available indicators

1a. Availability of local-level indicators on health care outcomes

	Indicator	Life expectancy			MM ratio	MM rate	Lifetime risk of MM	IMR	U5MR
		M	F	T					
1	National								
2	Nakuru Municipality								
3	Langa Langa								
4	Rhonda								
Source:		KNBS			MPND&V2030	MPND&V2030	MPND&V2030	MPND&V2030	MPND&V2030

1b. Availability of local-level data on health care outcome indicators

	Data	Pop in 5 year age bands			Deaths in 5 year age bands			# of maternal deaths in a pop	# of live births	Tot female pop in reproductive age (15-49)	# of deaths at ages 0 to 11 months	# of live births in the same period	# of deaths at ages 0 to 59 months	# of surviving children 0 to 59 months
		M	F	T	M	F	T							
1	National													
2	Nakuru Municipality													
3	Langa Langa													
4	Rhonda													
Source:		KNBS			KNBS			KNBS	KNBS	KNBS	KNBS	KNBS	KNBS	KNBS

2a. Availability of local-level disease-specific (morbidity) indicators for under-5

	Indicator	Malaria prevalence			ARI prevalence			Diarrhoeal illnesses prevalence			TB prevalence			HIV/AIDS prevalence		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National															
2	Nakuru Municipality															
3	Langa Langa															
4	Rhonda															
Source:		MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			PASCO/LVCT		

2b. Availability of local-level disease-specific (morbidity) data for under-5

	Data	Tot pop under 5			# of under 5 malaria confirmed cases			# of under 5 ARI confirmed cases			# of under 5 diarrhoea confirmed cases			# of under 5 TB confirmed cases			# of under 5 HIV confirmed cases		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National																		
2	Nakuru Municipality																		
3	Langa Langa																		
4	Rhonda																		
Source:		KNBS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			PASCO/LVCT		

3a. Availability of local-level disease-specific (morbidity) indicators for people 15–35 years of age

	Indicator	Malaria prevalence			ARI prevalence			TB prevalence			HIV/AIDS prevalence			Prevalence of congenital diseases		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National															
2	Nakuru Municipality															
3	Langa Langa															
4	Rhonda															
Source:		MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			PASCO/LVCT			MOPHS/MOMS		

3b. Availability of local-level disease-specific (morbidity) data for adolescents and youths (15–35)

	Data	Tot pop			# of malaria confirmed cases			# of ARI confirmed cases			# of TB confirmed cases			# of HIV confirmed cases			# of congenital disease confirmed cases		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National																		
2	Nakuru Municipality																		
3	Langa Langa																		
4	Rhonda																		
Source:		KNBS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			PASCO/LVCT			MOPHS/MOMS		

4a. Availability of local-level disease-specific (morbidity) indicators for adult population (36+ yrs)

	Indicator	Malaria prevalence			ARI prevalence			TB prevalence			HIV/AIDS prevalence			Prevalence of congenital diseases		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National															
2	Nakuru Municipality															
3	Langa Langa															
4	Rhonda															
Source:		MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS		

4b. Availability of local-level disease-specific (morbidity) data for adult population (36+ yrs)

	Data	Tot pop			# of malaria confirmed cases			# of ARI confirmed cases			# of TB confirmed cases			# of HIV confirmed cases			# of diabetes confirmed cases		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
1	National																		
2	Nakuru Municipality																		
3	Langa Langa																		
4	Rhonda																		
Source:		KNBS			MOPHS/MOMS			MOPHS/MOMS			MOPHS/MOMS			PASCO/LVCT			MOPHS/MOMS		

5a. Policy domain 1: Physical environment and infrastructure (availability of local-level indicators)

	Indicator	HHs with access to safe water	HHs with access to sanitary toilet facility	HHs served by city solid waste management syst.	HHs using solid fuel (wood, charcoal, paper, etc.)	Incidence rate of road traffic injuries (fatal and non-fatal)
1	National					
2	Nakuru Municipality					
3	Langa Langa					
4	Rhonda					
Source:		MOPHS/MOWI	MOPHS	NAKUINFO/KNDS	MOA/MOENVR	TRAFFIC POLICE

5b. Policy domain 1: Physical environment and infrastructure (availability of local-level data)

	Data	Tot # of HHs in the area	# of HHs with water connection level I, II or III	# of HHs with adequate excreta disposal facilities	# of HHs served by SWM system	# of HHs using solid fuel	# of people injured in road traffic accidents	Tot pop in the area
1	National							
2	Nakuru Municipality							
3	Langa Langa							
4	Rhonda							
Source:		KNBS	MOPHS/MOWI	MOPHS	NAKUINFO/ KNDS	MOA/MOENVR	TRAFFIC POLICE	KNBS

6a. Policy domain 2: Social and human development (availability of local-level indicators)

	Data	Youth literacy rate	Elementary completion rate	Health enrolment rate (NHIF)	Children (12-23 months) fully immunized	Under 5 children moderately to severely underweight	Infants exclusively breastfed until 6 months	Prevalence of teenage births	Facility-based deliveries	Skilled birth attendance	Prevalence of tobacco smoking among 13 to 15 years
1	National										
2	Nakuru Municipality										
3	Langa Langa										
4	Rhonda										
Source:		MOE	MOE	KNHDS	KEPI	KEPI	MOPHS/ KNNS	MOE/ MOPHS/ MOYA	MOPHS	MOPHS	NACADA/ MOPHS

6b. Policy domain 2: Social and human development (availability of local-level data)

	Data	# of youths 15-24 who have attained primary education (can read & write)	Tot pop 15-24 in the area	# of elementary graduates	# enrolled in grade 1	# of families enrolled in NHIF	Tot # of families	Tot # of children 12-23 months	# of children less than 5 years old classified as moderately to severely underweight	Tot pop under 5 in the area
1	National									
2	Nakuru Municipality									
3	Langa Langa									
4	Rhonda									
Source:		MOE	KNBS	MOE	KNHDS	MOPHS	KNBS	KNBS	MOPHS/KNNS	KNBS

6c. Policy domain 2: Social and human development (availability of local-level data) (continued)

	Data	# of infants exclusively breastfed until 6 months of age	# of adolescent girls 15 to 19 yrs old with teenage births	Tot pop 15-19 in the area	# of women delivering in health centres, birthing clinics, hospitals	# of deliveries attended by skilled health professional (MD, nurse, midwife)	Tot pop x 3.5%	# of 13 to 15 years old current smokers	Tot pop 13-15 in the area
1	National								
2	Nakuru Municipality								
3	Langa Langa								
4	Rhonda								
Source:		MOPHS/KNNS	MOE/MOPHS/MOYA	KNBS	MOPHS/MOMS	MOPHS/MOMS	KNBS	NACADA	KNBS

7a. Policy domain 3: Economics (availability of local-level indicators)

	Indicator	Employment rate	Housing ownership (percent of HHs with secure tenure)	Mean family income	Mean family expenditure	Subsistence threshold poverty line (absolute poverty)
1	National					
2	Nakuru Municipality					
3	Langa Langa					
4	Rhonda					
Source:		MOL/KNBS	COL/KNBS	MOF/MNP&V2030	MOF/MOPLND/KNBS	MOF/MOPLND/KNBS

7b. Policy domain 3: Economics (availability of local-level data)

	Data	# of people aged 15-64 who are employed	Tot pop 15-64 in the area	# of HHs owned, rented or occupied free with consent of owner	Tot # of HHs in area	Tot amount of income (Ksh) of all HHs in an area	Tot amount of expenditure (Ksh) of all HHs in an area	# of HHs living on $1/day
1	National							
2	Nakuru Municipality							
3	Langa Langa							
4	Rhonda							
Source:		MOL/KNBS	KNBS	COL/KNBS	KNBS	MOF/MNP&V2030	MOF/MOPLND/KNBS	MOF/MOPLND/KNBS

8a. Policy domain 4: Governance (availability of local-level indicators)

	Indicator	Government spending allocated to health and other social services (education, housing)	Social participation rate	Voter participation rate (national and local)	Percentage of locally generated revenue out of total budget	Index crime rate
1	National					
2	Nakuru Municipality					
3	Langa Langa					
4	Rhonda					
Source:		MOF/KNBS	MOGCSS	ECK	TREASURER TO THE COUNCIL	CID

8b. Policy domain 4: Governance (availability of local-level data)

	Indicator	Tot amount of budget allocated for health, education and housing	Tot amount of budget	# of families with a member of a people's org in an area	Tot families in an area	# of registered voters who voted in local and national elections	Tot pop of registered voters in an area	Tot amount of locally generated revenue	Tot amount of budget	# of victims of index crimes (violent crimes and crimes against property)	Tot pop in the area
1	National										
2	Nakuru Municipality										
3	Langa Langa										
4	Rhonda										
Source		MOF	MOF	MOGCSS	KNBS	ECK	ECK	TREASURER TO THE COUNCIL	TREASURER TO THE COUNCIL	CID	KNBS

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