

SAMBURU COUNTY

2022





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SAMBURU COUNTY INNOVATIONS REPORT [Innovations in Healthcare: Samburu County]

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FOREWORD

Counties across Kenya are working towards universal healthcare. Increasingly, they are recognizing the value of combining strengths and capacities of both the public and non-public sectors, yet information on the latter is often scanty or missing altogether. At the same time, there is a tendency towards reduced development assistance for health, which means that Kenya (like most other low- and middle-income countries) will need to identify alternative sources of resources (human, financial, technological, and physical). All these factors underscore the importance of encouraging public private sector engagement, collaboration, and partnership.

Effective engagement requires good information on what is happening outside of the formal government systems. It is for these reasons that the Open Phences Hub is undertaking to map tech and non-tech innovations taking place within the counties in Kenya.

Limited resources amidst boundless need create a huge demand for innovation. But these are unlikely to have meaningful impact, if policy leadership fail to appreciate their existence, role and impact, and therefore, consider them as resources during planning and budgeting.

This 'Samburu County innovations' report presents a summary of county information (general and healthcare information), selected healthcare indicators and county innovations (description and distribution). It has been prepared for a diverse audience. Anyone working/having interest in healthcare space and related sectors including health management teams, health facility managers, practitioners, health service users, persons working in health financing institutions, innovators, communities and community-based organizations. It was also developed to help healthcare managers appreciate the diversity of ideas and resources available within and outside of their jurisdictions. Finally, it was developed for health providers and investors to understand innovations, who they are targeted at, how they work, and what their (perceived and measured) impacts) for adoption and/or scaling.

The Open Phences team developed this document in recognition (a) the gap in the healthcare system on the low awareness of health system users on existing innovations and their potential impact, excessive fragmentation and duplication of innovations that serves similar functions but don't speak/connect with each other resulting in small scale innovators and ideas which have low probability of scaling (b) county management teams do not have a one resource where they can access information about the available health infrastructure, mortality and morbidity indicators and health service utilization indicators (that is updated on a regular basis).

The document was developed by Paul Waswa, Dan Makuba and Francis Wafula, with input from the broader Open Phences team that includes Noelle Orata, Elizabeth Gitau, Muriithi Njogu, Brenda Bunyasi, Annette Murunga, Cornelius Kiptoo, Irene Khayoni, Eric Tama, Peter Nguhiu and Lyndon Marani. Funding was provided by the Open Phences Hub.

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INTRODUCTION

Definition of Terms

Dominant economic activity - This is the economic activity that contributes the highest gross value added to the county GCP

Gini coefficient - The Gini coefficient is a statistical measure of economic inequality in a population. The coefficient measures the dispersion of income or distribution of wealth among the members of a population.

Age dependency ratio- This is the proportion of the population (age 0-14 and 65+ years) that is dependent on the working population (age 15-64 years).

Old-Age Dependency Ratio- This is the population aged 65 years and above relative to the total number of persons aged 15-64 years.

Child Dependency Ratio - This is the number of children aged below 15 years relative to the total number of persons aged 15-64 years.

Total fertility Rates - The average number of children a woman would have throughout her childbearing years (15-49).

Child Immunization (Fully Immunized) - This is the proportion of fully immunized children from 0 to 59 months.

Human Development Index - The human development index (HDI) is a summary measure of assessing progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living.

The Gender Inequality Index (GII) - reflects inequality in achievements between men and women in reproductive health, empowerment and labour market - the higher it is the more severe the inequalities are.

Rural Access Index - Measures the proportion of the rural population that can access an all-weather road within two kilometres.

County Information

Overview

Samburu County is within the northern parts of Great Rift Valley in Kenya (Figure 1). The County lies within ASAL region covering an area of 21,022 square kilometers, and is bordered by the following Counties Turkana (Northwest), Baringo (Southwest), Marsabit (Northeast), Isiolo (East) and Laikipia (South).

The County is a member of North Rift Economic Block (NOREB). Eighty percent is pastoralists' economic livelihoods.

Samburu County is administratively divided into three sub-counties, 15 wards and 108 villages (CIDP 2018- 2022)

Demographic features

Samburu county has a total population of 263,195 persons. Out of which 133,058 are male and 130,130 females. The county has a population density of 13 persons per square kilometre.

OTHER FEATURES

FEATURE	ESTIMATE
Gini coefficient	46.3
Age dependency ratio	125
Old age dependency ratio	6.5
Child dependency ratio	118.7
Rural Access Index - %	11
Population owning mobile phones (%)	27.2
Population accessing internet (%)	6.7

Health Information

Health Infrastructure

The Samburu County Health system is organized in accordance with the Kenya Essential package of health (KEPH) level structure from the household level to primary health care level to hospital level offering referral and specialized services. The county has 116 level II facilities, 18 level III facilities and 4 level IV facilities.

Currently the county has a total of 30 functional Community Health Units accounting for 48% of the total expected units in the County. These Community Health Units are distributed across the three sub counties in the following order, S- North 9, S-East 10 and S-Central=11 respectively.

Health personnel

Doctor patient ratio stands at 1: 10,000 and nurses' patient ratio stands at 91: 100,000 which is below the accepted national standards.

The health worker density of the county is at 14 per 10,000 population.

HEALTH OUTCOMES

INDICATOR	OUTCOME	YEAR
Child immunization(%)	82.5	2019
people living with HIV	2,965	2019
Delivery at health facility(%)	46.1	2019
Total fertility rate	4.9	2019
Infant mortality rate	24.1	2019
Under-5 mortality rate	39.0	2019
Maternal mortality rate	275/100,000	2019
Households accessing safe drinking water (%)	36.7	2019
Health insurance coverage(%)	6.4	2015/2016

Tech-Innovations

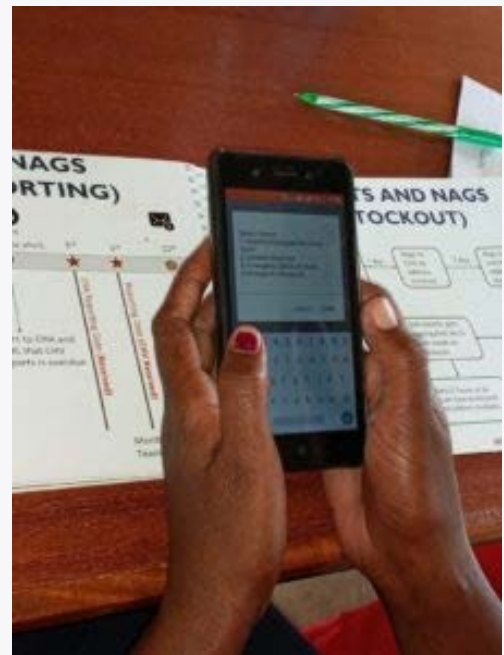
cStock



Every day 21,000 children still die from preventable causes, and an additional 1,000 girls and women die in pregnancy and childbirth. Community health volunteers (CHV) can reach these children and mothers by providing essential health services in local communities if they are well trained and equipped with basic lifesaving medicines to provide the services. Frequent stock outs of medicines among CHVs is one of the most frequently reported bottlenecks to successful community-based treatment programs, preventing CHVs from consistently providing services and leading to unnecessary deaths of women and children.

cStock is a simple tool that is feasible and acceptable to CHVs and provides real-time, actionable CHV supply chain data for supervisors, store managers, and stakeholders to resupply, coordinate, plan, and identify solutions to ensure lifesaving commodities are available to CHVs at all times.

It is a digital supply chain strengthening approach, implemented via multiple digital platforms. CHWs use cStock to report their health supplies stock levels, and the cStock system calculates which supplies, and the quantity, that the CHWs need and sends an alert to the supervisor responsible for their resupply. CHWs receive a message when their commodities are packed for resupply distribution so they don't waste time and resources traveling when no products are available.



DAKTARI SMART

M→PESA Foundation



The MPESA foundation in partnership with Lamu county and Gertrude's Hospital Foundation launched Daktari Smart, a telemedicine initiative in Lamu county. The initiative aims to reduce the number of referrals of sick children by giving county facilities access to specialists. It also helps optimize the capacity and reach of healthcare delivery systems by helping bridge the gap of access to healthcare services in Lamu.



Daktari Smart will also have a kit that comprises electronic medical devices such as the Electronic Stethoscope, Vital Signs Monitor, Derma scope Camera, Ultrasound Machine, Otoscope (examine the condition of the ear canal and eardrum) and the electrocardiogram (ECG) used to check the heart's rhythm and electrical activity.

Daktari Smart allows the health care worker at the local partner health facilities, to place the electronic medical devices such as a stethoscope or vital signs monitor on the patient. The specialist at Gertrude's Children's Hospital is then able to see the patient and hear the sounds in real-time without the interpretation from the health worker at the local facility.

Mbiotisho App



International Livestock Research Institute (ILRI) in partnership with the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) launched a one-year pilot study in Kenya's Samburu County as part of a larger project to develop and test low-cost data collection tools for assessing the nutrition status of households in Kenya's pastoral areas.

These tools are integrated into a mobile phone application (app), which is known as 'Mbiotisho' (our health), that is used by households members who have no formal education, to record and track indicators of their own health and nutrition status in near real-time basis. The caregiver's tool, which is known as 'Mbiotisho' , uses pictorials, illustration and audio to elicit information on child morbidity, dietary patterns, coping strategies and children's Mid-Upper Arm Circumference (MUAC) and provides households with individualized feedback on key health and nutrition indicators of nutritional progress against the international standards for those indicators. By April 2020, 22 community health volunteers (CHVs) and 189 caregivers from four community health units (CHUs) in Samburu were using the app.

Mobile Health Learning Solution



Amref Health Africa's Health Enablement and Learning Platform (HELP), uses mobile phones to teach and pass information to community health volunteers.

The partnership was launched in April 2013 to develop an efficient and cost-effective approach for training and supporting Community Health Volunteers (CHVs) and their supervisors, Community Health Extension Workers.

Non-Tech Innovations

Maternity Manyattas/ Maternity waiting Homes

Home delivery is a cultural norm in Samburu County which is exacerbated by long distance to health facilities, poverty and illiteracy. Skilled birth attendance is important in reducing maternal mortality yet the proportion is low at 19% as compared to 62% nationally.

Maternity Manyattas in order to attract mothers to deliver in the health facility construct a maternal manyatta shelter which would be used as a holding ground for mothers as they await their delivery date



Sisters of Mary Immaculate Empowerment Centre (SMIEC)

The aim is to reduce the practice of “beading” – a traditional practice among the Samburu people of Northern Kenya whereby warriors (Morans) are allowed to have a temporary marital relationship with very young girls (as young as 7 years old) from the same clan to prepare girls for marriage - through community awareness and access to medical and psychological care and education to affected girls in 12 villages in Samburu County, Kenya.

Affected girls who come to The Sisters of Mary Immaculate Empowerment Centre (SMIEC) will be referred within an existing network of hospitals and health facilities run by the Sisters of Mary Immaculate. Girls who are sheltered by SMIEC will be provided with formal/vocational education, sexual and reproductive health and rights (SRHR) education, and life skills training.



Through SRHR awareness campaigns in Samburu county, the program also creates awareness and education to reduce beading supportive environments and enable re-integration of affected girls into their communities in the long-run.

Samburu Girls Foundation, (SGF)



Samburu Girl's Foundation (SGF) is a child protection non-profit that works in Northern Kenya addressing harmful practices that affect the girl child among pastoralist communities, such as Female Genital Mutilation, Beading, and Child Marriage. SGF provides the rescued girls with safety that is care and protection, education and psycho-social support. The organization later integrates these girls back to their families through a systematic counselling and reconciliation program with the aim of making them agents of change.

Camel Ambulances/Camel Outreaches



Geographic limitations have long hindered efforts by the Kenyan government to provide health services to people in remote areas.

To mitigate this, a non-governmental organization known as Communities Health Africa Trust (CHAT) has stepped in helping to transport medication to remote areas of need using camels. The main mission is to assist vulnerable communities to access much needed medication.



The common services offered include family planning, HIV/AIDS related services, sex education, and also treats diseases such as malaria and diarrhoea.