



COUNCIL OF GOVERNORS

A COMPENDIUM OF COUNTY INNOVATIONS AND BEST PRACTICES

5TH EDITION



JANUARY - JUNE
2023



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Maarifa Centre

Sharing Kenya's Devolution Solutions

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Maarifa Centre

Maarifa Centre is the premier subnational knowledge hub established to serve as Kenya's knowledge sharing and learning platform to support effective governance and service delivery at the County level. The vision of the Centre is "To be Kenya's Premier Knowledge Sharing and Learning Platform for Effective Governance and Service Delivery for Sustainable Development".



CoG Vision

Prosperous Counties that are drivers of socio-economic growth and development and quality service delivery.



CoG Mission

To deepen devolution through coordination, consultation, information sharing, capacity building, performance management and dispute resolution.



CoG Values

Collaboration and Partnership; Integrity; Diversity, Equity, and Inclusion; Innovation; Professionalism



CoG Motto

48 Governments, 1 Nation

Maarifa Centre Motto

Sharing Kenya's Devolution Solutions

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ABBREVIATIONS AND ACRONYMS

| | |
|----------------|--|
| 4G | Fourth Generation |
| A&E | Accidents and Emergencies |
| ASDSP | Agriculture Sector Development Support Programme |
| CECMs | County Executive Committee Members |
| CHAs | Community Health Assistants |
| CHVs | Community Health Volunteers |
| CIDP | County Integrated Development Plan |
| CMNH | Community-based Maternal and Newborn Health |
| CoG | Council of Governors |
| ECF | East Coast Fever |
| FAO | The Food and Agriculture Organization of the United Nations |
| FFPP | Fish Farming Productivity Program |
| GBV | Gender-based Violence |
| GIS | Geographic Information System |
| GIZ | The Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH |
| GTS | Geospatial Technology System |
| iCCM | Integrated Community Case Management |
| ICT | Information and Communications Technology |
| KCSAP | The Kenya Climate Smart Agriculture Project |
| KDDC | Kakamega County Dairy Development Corporation |
| KEMSA | Kenya Medical Supplies Authority |
| KNH | Kenyatta National Hospital |
| KPLC | The Kenya Power & Lighting Company |
| LREB | Lake Region Economic Bloc |
| M&E | Monitoring & Evaluation |
| MoH | Ministry of Health |
| MoU | Memorandum of Understanding |
| NEMA | The National Environment Management Authority |

| | |
|--------------|---|
| NHIF | National Hospital Insurance Fund |
| PVC | Polyvinyl Chloride |
| RMCH | Maternal and Child Health |
| RTA | Road Traffic Accidents |
| SGBV | Sexual and Gender-based Violence |
| SIM | Subscriber Identity/Identification Module |
| ToT | Training of Trainers |
| TVET | Technical and Vocational Education and Training |
| UHC | Universal Health Coverage |
| UNFPA | United Nations Population Fund |
| WHO | World Health Organization |

FOREWORD FROM THE CHAIR



It is with great pleasure that I introduce the Fifth edition of the Compendium of County Innovations and Best Practices on Service Delivery. This Compendium represents a remarkable collaboration between the County Governments and the Maarifa Centre, showcasing the outstanding progress and transformative initiatives undertaken by our Counties in pursuit of prosperous and democratic governance.

Allow me to acknowledge and commend the outstanding achievements made across different sectors, greatly impacting the lives of Kenyans. The strides made in healthcare, such as advancing access to specialized care through telemedicine and the successful implementation of the Universal Health Coverage (UHC) pilot in Isiolo County, and, witnessing the substantial impact of UHC implementation in Machakos County, are a testament to the tireless efforts in ensuring accessible and high-quality healthcare services for our citizens. The innovative Predominant Group Ante-Natal Care Model implemented by Machakos County has been instrumental in improving maternal and child health outcomes, setting an exemplary standard for other Counties to follow. Furthermore, I applaud Murang'a County for its exceptional initiative in providing free medical cover to vulnerable households. This noble effort ensures that those who are most in need have access to essential healthcare services, promoting inclusivity and equity within our society.

The transformative initiatives within the transport, infrastructure, and energy sector, including Vihiga County's proficient use of Geographic Information System (GIS) data for equitable community development planning, implementation, and monitoring, as well as Kilifi County's steadfast commitment to developing renewable energy sources and Vihiga County's astute



This Compendium serves as a valuable resource for sharing knowledge, inspiring collaboration, and encouraging replication of

utilization of solar energy in the Kaimosi water project, exemplify the unwavering dedication to environmental conservation and the enhancement of living standards.

In the blue economy and agricultural sector, notable initiatives such as the Mwitoko Fish Farm Project, empowering fish farmers in Vihiga and its environs towards sustainable and profitable aquaculture businesses, along with Garissa County's innovative cattle feed to mitigate livestock mortality during drought periods, and the successful One-Cow Initiative in Kakamega County, providing sustainable livelihoods and improved nutrition for vulnerable households, showcase the incredible impact County Governments have made in transforming lives.

Additionally, the commitment shown in the realm of gender, youth, sports, culture, and social services, exemplified by Homa Bay County's diligent efforts in mitigating gender-based violence through community sensitization and establishment of specialized centres, and Tana River County's laudable initiative in setting up a Youth Empowerment Centre, underscores the unwavering commitment to empowering our youth and fostering inclusive societies.

These accomplishments are a testament to the dedication, resilience, and collaborative spirit demonstrated by all individuals involved in these transformative projects.

This Compendium serves as a valuable resource for sharing knowledge, inspiring collaboration, and encouraging replication of successful initiatives across Counties. I encourage all readers to engage further with the Maarifa Centre, share your stories, and explore the valuable knowledge assets/resources available. Visit the Maarifa Centre Portal at <https://maarifa.cog.go.ke/> to download a copy of this publication.

H.E. Anne Waiguru, EGH
Chair, Council of Governors

ACKNOWLEDGEMENT



“

I commend you for your unwavering commitment and sincerely thank you for turning this edition into a reality. Your relentless efforts continue to inspire and affirm to all that devolution indeed is working.

Thank you to the County Governments and their dedicated teams for their invaluable contributions to the Fifth edition of the Compendium of County Innovations and Best Practices on Service Delivery. Your remarkable progress and transformative initiatives exemplify our collective pursuit of prosperous and democratic governance in Kenya, and I am honored to be part of this extraordinary endeavor. This Compendium showcases remarkable achievements across various sectors, including healthcare, transport, infrastructure, energy, agriculture, blue economy, and gender, youth, sports, culture, and social services.

I would like to express my sincere appreciation to the Maarifa Centre for its crucial role as a preeminent platform for knowledge-sharing and learning. Through its unwavering commitment, the Maarifa Centre has facilitated effective governance and service delivery for sustainable development. The production of bi-annual compendia, including this edition, serves as a beacon of inspiration, highlighting County success stories and igniting a spirit of learning and innovation amongst all Counties. This initiative significantly contributes to the continuous improvement of service delivery, and I am immensely proud of its impact.

I would also like to extend my deepest gratitude to all the County officials who wholeheartedly offered their time for interviews and validation. Asanteni sana! I acknowledge the tremendous cooperation and support received from the nine (9) Counties, and I applaud their

willingness to share valuable information. To all the contributors, the editors, and the Maarifa Centre staff, I commend you for your unwavering commitment and sincerely thank you for turning this edition into a reality. Your relentless efforts continue to inspire and affirm to all that devolution indeed is working. I celebrate each and every one of you, and I am already looking forward to the 6th edition. Finally, I would like to sincerely thank Options Consultancy Services for supporting Maarifa Centre in the design, printing and dissemination of this document.

For further engagement, please feel free to reach out to the Maarifa Centre through the email maarifacentre@cog.go.ke and share your story. Download a copy of the 5th Edition of the Compendium on the Maarifa Centre website <https://maarifa.cog.go.ke/> and you can also follow us on Twitter @Maarifa_Centre to learn more about what Counties are doing in various sectors. Together, let us continue to build a prosperous and democratic Kenya.

Mary Mwititi
Chief Executive Officer,
Council of Governors

INTRODUCTION

This Compendium is the fifth edition of a bi-annual publication pioneered in 2021 by the Council of Governors' knowledge hub, the Maarifa Centre. The inaugural edition was a collection of County success stories in the fight against COVID-19. The second edition featured County service delivery good practices and innovations in 7 sectors from 13 Counties. The third edition focused on service delivery in 5 sectors and featured 9 Counties, with some contributing more than one best practice/innovation. The fourth edition focused on only 2 themes – Facilities Improvement Financing (FIF) and Community Health Services (CHS).

This fifth edition features County service delivery good practices and innovations from 7 Counties in 4 sectors, including Health (5 stories); Agriculture, Livestock & Cooperatives (3 stories); Land, Housing & Urban Development (3 story); and Gender, Youth, Sports, Culture and Social Services (2 stories).

The Maarifa Centre receives contributions from all Counties and continues to encourage Counties which are yet to be featured by Maarifa to contact Maarifa with their success stories for documentation.

This Compendium is accessible on the Maarifa portal and in hard copy. It targets County Government officials to enhance knowledge sharing and timely adoption of good practices and innovations deriving from various experiences, to serve citizens better. Other devolution stakeholders, such as the national government, development partners, civil society, community-based organisations, the private sector, researchers, university students and citizens themselves, will also find it useful.

If you want to be linked to the County resource persons featuring in this compendium, Maarifa staff can facilitate this.



Maarifa Centre

PART 1.0: HEALTH



Pregnant women during an ANC group meeting

1.1 Machakos County Predominant Group Ante-Natal Care Model

Introduction

Reducing Maternal Mortality remains a top priority in the SDGs yet it remains a global issue more so in sub-Saharan Africa. Ante Natal Care (ANC) on the other hand is one of the key strategies for reducing maternal and perinatal mortality. ANC achieves this by providing appropriate medical and educational measures. In 2020, Machakos County's Maternal and Perinatal Mortality was a major problem estimated at 13/1000 and 9.1/1000 respectively. This was attributed to low ANC Uptake (many women were not attending all 4 recommended ANC clinics) and low-skilled birth delivery. Further investigation proved that long waiting hours, unavailability of quality services and high burn out amongst MCH staff as major causes of dissatisfaction among mothers attending ANC clinics

Implementation of the Practice (Solution Path):

Machakos County Health Department in collaboration with JPHIEGO designed a model-**Predominant Model for Group Antenatal Care** which entails putting ANC mothers of the same gestational age in groups of 8-30 mothers

and taking the group through appropriate Reproductive Maternal and Child Health (RMCH) educational sessions. The Model required space, equipment, furniture, stationery, health workers and support staff to operate optimally. JPHIEGO supported Machakos County by providing the space (Tent) where the ANC groups meet, stationery (Flip charts, marker pens, biros) training modules, equipment (BP machines, weighing scales, screen) and furniture (chairs, examination beds) while the County provides refreshments for the mothers. The County rolled out this approach in 13 facilities, four (4) high-volume facilities and nine (9) low-volume facilities. The ANC groups have two (2) sessions per week (Tuesdays and Thursdays) in High volume facilities due to other competing MCH roles and 5 sessions (Mondays to Fridays) in low-volume facilities. The following are the model's different gestational groups and their respective RMCH educational modules;

| No | Mothers Age | Gestational | Educational Module |
|----|-------------|-------------|---|
| 1. | 16-20 Weeks | | Preventing problems in pregnancy |
| 2. | 20-24 Weeks | | Danger signs and problems in pregnancy |
| 3. | 24-28 Weeks | | Birth planning and complication readiness |
| 4. | 28-32 Weeks | | Family Planning |
| 5. | 32-36 Weeks | | Preventing problems after birth |
| 6. | 36-38 Weeks | | Baby problems |
| 7. | 38-40 Weeks | | Female challenges after birth |

Results of the practice (outputs and outcomes)

The Predominant group ANC model has reduced the long waiting hours because mothers are served as a group. It has also reduced the MCH staff burn out leading to improved quality services. As a result, it increased the County's RMCH Indicators (Number of four (4) ANC Visits, Family Planning Uptake, and Skilled Birth Deliveries) and even immunization uptake. Increasing these RMCH indicators eventually reduced Maternal and Perinatal Mortality rates as summarized in the indicators table below.

| No | Indicator | 2020 (Before Group ANC) | 2022 (After Group ANC) |
|----|---------------------------|-------------------------|------------------------|
| 1. | Perinatal Mortality | 9.1/1000 | 5/1000 |
| 2. | Family Planning uptake | 50.9% | 60% |
| 3. | Immunization uptake | 89.3% | 93.4% |
| 4. | Skilled Birth Deliveries | 79.3% | 85% |
| 5. | No of 4 ANC Visits | 63.8% | 73% |
| 6. | Cervical Cancer Screening | 5% | 30% |

The County intends to continue with this best practice even after the JPHIEGO project ends through the Linda Mama Program. The funds collected through Linda Mama (reimbursement) will be sufficient to support the Model and roll it out in the remaining facilities.

Lessons learnt:

The following are the lessons the County learned while implementing the Predominant Group ANC Model:

- The group model approach is time-saving because it covers a wide knowledge area (Integrated Sexual Reproductive Health Services) in a short period of time.
- This approach is a solution for the MCH Staff shortage, the staff spent only a maximum of 2 hours, then proceed to attend to other MCH roles.

There is no staff designated for running the model and hence MCH staff have to multitask amidst other competing roles more so for high-volume facilities.

Recommendations:

- There's a need to designate specific staff for the Group ANC Model.
- There's a need to set up a revolving Fund to run the Model efficiently.
- It is important to involve CHVs since they are the ones that refer mothers to facilities and inform them to attend the Group ANC.
- There's a need to continually train CHVs on Group ANC Basic Module to maximize its benefits.

1.2 Advancing Access to Specialized Care in Isiolo County Health Facilities through Telemedicine

Introduction

The Kenyan Health sector is gradually embracing technology as one of the interventions geared towards achieving Universal Health Coverage (UHC) for all by 2030. One of the components of UHC is the ability of a health system to increase access to health services and track, regulate, and monitor medical cycles such as medicine intake, therapy, and advance specialized treatment in HRH-limited areas. The government's support and commitment to improving access to affordable healthcare and reducing out-of-pocket spending lie in the adoption of UHC as a priority for health. In December 2018, Isiolo County was selected as one of the four pilot Counties for UHC with a focus on making health services affordable, accessible, and of the expected quality. Isiolo is also one of the Counties that have adopted telemedicine through a partnership with Kenyatta National Hospital and enabler partners, including Huawei and Safaricom.

Problem Statement/Situation Analysis

Over 70 per cent of the population in Isiolo County lives in rural areas where health facilities are inadequate and sometimes inaccessible. There are three (3) level 4 health facilities (Merti, Isiolo and Garbatulla), four (4) level 3 health facilities and forty-one (41) level 2 health facilities in the County. The County experiences inequitable coverage of health services which results in disparities between Sub-Counties, urban and rural residents, thus poor health statistics and low performance in indicators.

Health human resources in Isiolo County are below the required WHO-recommended ratio of health practitioner to patient. Isiolo County has 1159 health workers and support staff against the recommended minimum of 2338, meaning there is a gap of 1179.

There exists a disparity in numbers, cadres and distribution of the health workforce in the County. For instance, the Garbatulla level 3 health facility has only one doctor. The doctor-population ratio for the County is 1:20,000. The County has a maternal mortality rate of 790/100,000 against the national target of 342/100,000. Skilled birth deliveries are also low with an estimated 50% of women delivering at home.

Isiolo is heavily dependent on referral services for specialized care. Besides the semi-functional County referral system, advancing referral services has been an uphill task for the County due to the poor road infrastructure, long distances travelled to reach the County Referral Hospital and erratic operation and maintenance of ambulatory services.



Isiolo County Teaching and Referral Hospital

With the vastness of the County, telemedicine technology enhanced the UHC agenda by opening up remote areas to have access to medical specialists and facilitate reliable and efficient healthcare services. Telemedicine saves time and significantly reduces the indirect cost of care.

Additionally, telemedicine reduces the chances of cross-infection and transmission of infectious diseases from a patient to a healthcare professional. This technology saves time and offers time-efficient solutions.

Implementation of the practice

In May 2022, Isiolo County signed an MoU with Kenyatta National Hospital as a framework for collaboration in implementing joint integrated development programmes on telemedicine. The MoU has three objectives:

1. Increase access and utilization of specialized care for residents of Isiolo County. This required the set-up of a teleconnection between the County Teaching and Referral Hospital and Kenyatta National Hospital; a three-way linkage between the Subcounty facilities, the County facility and the national referral facility. For the pilot phase, the full connection was done in Garbatulla Sub-County Hospital.
2. Huawei, a technology company which develops high-resolution equipment, partnered with Isiolo County

to deliver health care through telemedicine. The tech company procured and installed high-resolution cameras and monitors in four level 4 and 5 health facilities.

3. Capacity building of systems users (health workers and health managers) for effective utility of telemedicine and electronic health management systems. The Health Department in the County schedules weekly medical education for health service providers.
4. Installation, use and interoperability of comprehensive electronic management system in 31 health facilities (L2-L4) and community units (L1) in the County. This will complete the hub and spoke model for proper referral of conditions, which aids the treatment and management of complicated cases in facilities that have few staff and far-flung lower facilities.

Sustainability

For the sustainability of the project, the County offers weekly medical education on telemedicine and electronic health management systems to County Health Department staff.

With telemedicine equipment and support from Safaricom who facilitate network coverage to enable

effective communication through 4G Safaricom SIM card internet. When a medical officer ascertains that a certain illness is complicated, a teleconference is then configured between Garbatulla Referral Hospital (telemedicine enabled) and the Isiolo County Teaching and Referral Hospital for further assessment and treatment. For cases that cannot be solved at this level, further configuration is then done from the Isiolo County Referral Hospital to Kenyatta National Hospital.

Results of the practice

Improved access to specialized care

Through the telemedicine approach, 19 cases have been referred to Isiolo County Teaching and Referral Hospital while 4 complications which couldn't be handled at the County level were referred to Kenyatta National Hospital.

There is advanced teleconferencing equipment in the facility, including procurement of high-resolution equipment, renovation and set-up of telemedicine rooms in Isiolo and Garbatulla Sub-County hospitals.

| Referring facility | Receiving facility | No. of cases referred | Consultant's speciality |
|--|--|-----------------------|--|
| Garbatulla Sub-County Hospital | Isiolo County Teaching and Referral Hospital | 19 | Obs/Gyn- 5; Physician- 13; Paediatrician – 1; Psychiatry – 1 |
| Isiolo County Teaching and Referral Hospital (ICTRH) | Kenyatta National Hospital | 4 | Obs/Gyn – 1; Cardiothoracic – 1 |
| Renal – 1; Urologist/ Paediatric nephrologist -1 | | | |
| Total | | 23 | |

Lessons learnt

1. Scheduling of telemedicine: The uncoordinated scheduling of consultants for telemedicine leads to a delay in the commencement of telemedicine at ICTRH. A schedule accessible by all concerned should be made available to avoid appointment overlaps.
2. Technology, ICT challenges: the Garbatulla team has inadequate teleconferencing applications and management abilities, leading to delays as the consultant waits for them to set up before he/she can attend to patients. It may not be easy to find a user-friendly telehealth platform that fits everyone's

technology needs. It's important to provide continuous ICT training and support.

3. Medical Confidentiality: Storage of digital medical records and recordings of teleconsultations poses new challenges in ensuring patients' confidentiality. Plans are underway through the Ministry of ICT, to enable the storage of telemedicine digital data at Konza City for the security, confidentiality and integrity of the data.

Recommendations

- For telemedicine to pick without hitches, the County needs to invest in deploying staff to interlinked facilities as well as train staff on the effective use of ICT in telemedicine. The County's ICT Officer should be trained to provide continuous support to medical staff.
- Inter-sectoral collaboration with health actors (MoH, KNH & UNFPA), non-health actors (Ministry of ICT, Konza City) and private-sector actors (HUAWEI & Safaricom) is key for the successful implementation of telemedicine.
- Counties should establish clear, streamlined policies and standards around telehealth practice to enable easier implementation for doctors.

Further reading

<https://www.kenyanews.go.ke/first-telemedicine-clinic-commissioned-in-tiaty/>

<https://kmpdc.go.ke/2021/02/28/telemedicine-gains-pace-in-kenya-as-kmpdc-approves-20-hospitals-to-roll-out-services-amid-covid-19-containment-measures/>

1.3 Murang'a County Provides Free Medical Cover to Vulnerable Households



The Governor of Murang'a County, H.E. Irungu Kang'ata, handing the Kang'ata Card to a beneficiary

Introduction

The County Government of Murang'a is providing free medical care to 20,000 vulnerable households through the Kang'ataCare project. This project is aimed at ensuring all households have access to medical cover. The lack of regular medical checkups has continued to contribute to the spread of communicable infections in the County. To curb this, the County has called for mass biometric registration for the first cohort of medical cover beneficiaries from 21st February 2023 to 8th March 2023. Identification and selection of beneficiaries is done through a vetting process which ensures there is detailed verification of information of the selected persons. The beneficiaries don't have to wait before the card is activated for use, once the registration and submission of the Kang'ata card is done, a patient can use it at any public hospital immediately.

On 24th October 2022, the County signed a Memorandum of Understanding (MoU) with the National Hospital

Insurance Fund (NHIF) and established a partnership to offer needed support and advice on matters related to medical cover. With the help of the NHIF, the County has also created awareness on why registering for the medical cover is important, especially for Persons with Disability (PWDs) and sickly old aged people. The County has established a vetting committee comprised of sub-chief, area chief, a nyumba kumi representative and church leaders to identify applicants deserving the cover.

The Kang'ata medical cover provides comprehensive inpatient care in government and selected private facilities. The cover also provides KSh100,000 for burial expenses on a single claim of a principal member. To manage drug addiction, especially alcohol, the County through the cover offers free mental and alcohol addiction rehab services and checkups in selected facilities. For patients in urgent need of surgery and international medical services, the cover offers KSh500,000 to the card holder. In the next cohort, the County hopes to support more than 20,000 households.



MURANG'A COUNTY GOVERNMENT

KANG'ATACARE BENEFITS

1. Comprehensive inpatient care in Government and select private facilities.
2. Outpatient care in contracted health facilities.
3. Optical and dental care in Government and select private facilities.
4. Inpatient/ dental / optical / outpatient covers man, wife, children aged 0-18 and 18-25 if in college.
5. Last expense(burial expense) which is Ksh.100,000/= single claim for Principal Member, spouse claim Ksh. 50,000 single claim for main parent in law.(parents of both sides)
6. For outpatient, person needs to choose a hospital which they can only change after 3 months eg. If you choose Kirilani Mission Hospital, you stay there until 3 months. If they choose government facility they can roam as they wish.

OTHER BENEFITS

7. Free ambulance evacuation from an accident scene or a health facility by dialing toll free 1199
8. Ksh 500,000 treatment abroad.
9. Free mental and drug addiction (including alcoholism) checkups in selected facilities.

FOR QUERIES CONTACT: 0757 562 988

KANG'ATA **NHIF**

“

The Kang'ata medical cover provides comprehensive inpatient care in government and selected private facilities.



Registration of vulnerable families in Murang'a



Machakos Level 5 Hospital

1.4 The Impact of UHC Implementation in Machakos County

Introduction

In 2019, Kenya launched the Universal Health Coverage (UHC) Scheme, which was piloted in four Counties: Machakos, Nyeri, Isiolo, and Kisumu. Its purpose was to ensure Kenyans access health services where and when needed without financial hardship. The four Pilot Counties were selected through an evidence-based process considering their disease burden. Machakos County was selected due to the high number of Accidents and Emergencies (A&E), mostly from the Road Traffic Accidents (RTA) that occur along Mombasa Road. The County experienced delayed response to Public Emergencies, including RTAs, Medical emergencies, fire outbreaks, and natural disasters, due to a lack of resources required to respond. Secondly, the public (Motorists, community, bystanders etc.) lacked basic knowledge on how to reduce, respond and handle accidents and emergencies, which led to the mishandling

of victims hence increasing the County's A&E mortality rates. Inadequate personnel and equipment to manage such emergencies in the County hospitals contributed to RTA Mortality Rates

Implementation of the Practice

The County Government of Machakos, through the UHC Pilot program, focused on four target areas: delivery of basic and specialized services, Health Systems Financing, Community Health Services, and Public Health Services. Under the delivery of basic and specialized services, the County acquired five Advanced Life Support (ALS) ambulances and set aside funds for Operations and Maintenance (O&M). The five ambulances were an addition to the 70 ambulances already owned by the County. The O&M funds catered for the maintenance of ambulances and fire engines to ensure timely response to emergencies. The County Emergency Medical Technicians (EMT) department, through the Dispatch Control Center, ensured there was an ambulance well placed in every basic unit (sub-ward) to respond to disasters/emergencies.

The County Government of Machakos conducted sensitization forums to create awareness on reducing, responding to and handling accidents, emergencies, and disasters. The forums were conducted at three levels: Leadership and Governance, which targeted County executive and assembly leadership; Internal, targeting the County and Sub County health management teams; and the Community, which targeted both primary & secondary schools and Community Health Volunteers (CHVs). The County further employed more health care workers, including medical equipment (CT scan and MRI) operators and implemented the 'downward expertise movement' whereby the medical services are taken closer to the need (decentralizing from high-level facilities to low-level facilities). To reduce referral costs, Machakos County Government hired consultants/experts from Kenyatta National Hospital and revived the Community Health Services by providing CHVs with training kits, uniforms, capacity building and a stipend (KSh 2,500 p.m.).

Results of the Practice

Reduced RTA Mortality Rates. The acquisition of ALS ambulances and sensitization of the public on reducing, responding to, and handling public emergencies contributed to the reduced number of deaths caused by RTA from (1,776) in 2019 to (917) in 2020.

Reduced Maternal Mortality. The Operations & Maintenance allocation ensured all the ambulances were well maintained to respond to public emergencies, including medical emergencies, e.g., mothers in labour, which contributed to the reduction of maternal deaths by 3%.

Decongestion of High-Volume facilities. The downward expertise movement approach ensured the service was taken to the decongested high-volume facilities, e.g., level 4/5 hospitals creating room for extremely critical cases.

Decongestion of the Outpatient Department. Activation of the Community Health Volunteers dealing with preventative care led to the decongestion of the outpatient department.

Optimal resource utilization. Hiring consultants/experts like oncologists from Kenyatta National Hospital was less costly compared to referring patients to Kenyatta National Hospital, which would incur expenses such as fueling ambulances and paying for the services.

Availability of Quality Services. Hiring more Health workers, including Medical Equipment Operators (CT Scans, MRI Machines) ensured the availability of good quality services.

Lessons learnt:

The lack of a proper framework for implementing UHC resulted in delayed service provision. Disbursement of funds was done through the Ministry of Health to County Revenue Fund and later to Health Departments. This was time-consuming and delayed service delivery.

UHC requires resources, and therefore, it needs commitment from both levels of government.

Recommendations

There is a need for a proper UHC implementation framework, such as UHC operation guidelines.

There is a need for sensitization of both the County government executive and assembly (to avoid political interference) and the public for enrollment.

UHC needs a Multisectoral approach for its success.

There is a need to increase the healthcare workforce before implementation. Due to free services, the number of patients seeking health care surpasses the required patient-to-doctor ratio.

Commodities and supply agencies need to be well-prepared to avoid stockouts.

For UHC to work, there is a need for ringfencing of health funds to ensure the flow of funds goes directly to facility accounts and avoid the long bureaucratic approval channel that disrupts services.

1.5 The Impact of UHC Pilot in Isiolo County

Introduction

Universal Health Coverage (UHC) in the Kenyan context refers to access to quality health services at an affordable cost, and shields communities and individuals from impoverishment when seeking Health Care. The Kenyan UHC program endorsed under The Big 4 Agenda was actualized in December 2018 as a pilot in 4 Counties in Kenya.

Isiolo County was one of the beneficiaries of the one-year pilot phase of the program. The County covers an area of 25,336 km² with an estimated population of 287,438 and consists of three Sub-counties namely Isiolo, Garbatulla, and Merti. Isiolo was selected as a pilot County based on its geographical location whose land is arid and semi-arid (ASAL), its low development rate, and the high maternal mortality rate which currently is at 790 deaths per 100,000 population against the national rate of 350/100,000. Most residents are pastoralists who are

either, fully nomadic, semi-nomadic, or settled, therefore delivering health care was difficult.

Isiolo County has a poverty index rate of 0.07%, resulting in limited financing for its health care; therefore, affecting health-seeking behaviour. The abolition of user fees at PHC and referral facilities would reduce the level of poverty through medical expenditure. The County had limited health human resources with some facilities having only one nurse manning and attending to the patients.



Map of Isiolo County

Implementation of the Practice

The principle of implementation of UHC across all the pilot Counties was to offer comprehensive health services for all people in the Counties at no cost. Although there was no guide on the extent and scope of service delivery, the Ministry of Health gave a conceptualized guide to the Counties on the use of UHC funds. In Isiolo, a total of **KSh.20,720,797** had been allocated to support Community Services. 30% of the fund is channelled through KEMSA to support CHV kitting and 70% towards CHV training and interventions including supportive supervision and formation of functional community health units. To facilitate basic and specialized services, Isiolo County was expected to get **KSh. 5,596,625,544**. 30% was to be spent on Operations and Maintenance and blood services and 70% was retained in KEMSA for Commodities. **KSh141,145,255.01** was earmarked for health system strengthening with 30% going to Basic Medical equipment through KEMSA, and 70% disbursed in the Counties. However, not all the money was disbursed. Isiolo County registered (90%) 40,000 of the total households and discontinued user fees at level

4 and 5 facilities to enable access to free health care in the public hospitals. The County then got conditional grants for the user fee forgone.

Sustainability

Since the shift in the mode of implementation of UHC in Kenya from input-based financing (2018 December) to output-based financing (2020-2022), Isiolo County was left with a gap in resources of up to **KSh4,191,489.36** when the pilot phase lapsed.

The lack of a UHC benefit package made the sustainability of services difficult. There was no proper plan for transition regarding forecasting and quantification for commodities. The allocations that the County made for commodities could barely match the funds that had been disbursed through UHC. As a result, stockout of essential pharmaceuticals and non-pharmaceuticals was continuous in lower-level facilities and the county-level facility. The County has a KEMSA debt of up to KSh78 million.

With the discontinuation of conditional grants for level 4 and 5 facilities, the quality of care reduced in public facilities, forcing patients to seek services in private facilities that have an adequate supply. For instance, departments like dental and renal closed down due to the lack of supplies.

For sustainability measures,

1. Isiolo County has plans to absorb the UHC contracted human resources for health.
2. The County continues to pay stipends for the CHVs to sustain level 1 services.
3. The scale-up of UHC took output financing. Isiolo County registered (50%) 7,808 households for National Hospital Insurance Fund (NHIF) coverage as indigent through Community level mobilization.

Achievements/ Results of the practice

Increased access to health services in Isiolo County

Free health care removed the barrier to access by allowing people to get essential services at no cost. This is manifest through the change in uptake of ANC services, increased attendance in the outpatient department, an increase in skilled deliveries, and improved health-seeking behaviour.

Construction of new facilities to bring services closer to the citizens.

Ten new dispensaries were constructed: three (3) in Garbatulla Sub-County (Biliqi, Kombola, and Yaqbarsathi dispensaries; five (5) in Isiolo Sub-County (Ngaremara, Noloroi, Lebarsherik, Tuale, and Gotu Dispensaries) and two (2) in Merti Sub-County (Bulesa Goda and Saleti Dispensaries). There was an upgrade of dispensaries to health centres in Merti Sub-County (Bisan Biliqi) and Isiolo Sub-County (Bula Pesa, Eremet, and APU Dispensaries). As a result, the average radius between one facility to the next was reduced from 49 km to 42 km.

Increase in human resources for health by number and skill mix. Primary-level facilities improved from one practitioner to two and some facilities got doctors, and clinical officers while others got nurses. However, challenges of management and transition of the staff took up to two years to be solved when the County accepted to absorb the HRH.

Supportive supervision and coordination were smooth across all facilities. County officers guided, monitored, and evaluated health service delivery even in the marginalized regions of the County. The County did on-the-job training, redistribution of medicine to ensure efficient utilization, and delivering guidelines and SOP to the far flanged Counties.

Improved community health services. Isiolo County currently has 50 Community Health Units and deployed 760 CHVs and 50 Community Health Assistants (CHAs) serving who are responsible for community health engagement. In 2019, the County partnered with Living Goods, a non-profit organization supporting the digital empowerment of community health workers, to strengthen community health services, and a mark is seen in the digitalization of community health data. Living Goods equipped CHVs with smartphones and tablets to improve on reporting through the Ministry of Health (MoH) data collection tools (MOH513 and MOH514 tools). Isiolo County 760 CHVs were trained on the Basic Module, Integrated Community Case Management of common childhood diseases (iCCM), and Community-based Maternal and Newborn Health (CMNH) as well as on the use of a smart health App.

An uninterrupted and adequate supply of medical supplies

Before the UHC, the KEMSA supply to Counties was erratic. Isiolo had a maximum of KSh50 million per financial year for procuring supplies. Through the UHC project, Isiolo had an adequate supply of commodities with an order fill rate of over 100 %. KSh392 million was allocated to commodities.

funding, services often degraded in quality, which was the polar opposite of the UHC goal to offer quality services.

2. Despite the national government's commitment to the UHC program in the Counties, County Governments made no commitments to the procurement or sustainability services after the shift of UHC from input to output-based financing.
3. KEMSA supply for lab reagents was a challenge given the fragmentation in equipment brands which could not all be covered by the reagents being supplied by KEMSA. Later, KEMSA was unable to satisfy the demands of all facilities; what was out of stock in KEMSA including the basic equipment was not supplied to the counties. Currently, the order fill rates go up to 67%.
4. After the UHC period, the County fell back to the usual erratic supply of medicine despite increasing their allocations to up to 150 million.

NHIF registration numbers in the County are still low. Therefore, the facility benefits less from the NHIF reimbursements. Currently, only 52% of the Isiolo population has NHIF coverage. County research by the director approximates the potential revenue lost up to KSh104 million in capitation, Linda Mama and Edu Afya.

Lessons learned

- There is a need for more time to be allocated to the implementation of UHC and similar projects. The period for implementation of the pilot phase was short, before the County had mastered the implementation, the allocated period of execution expired hence leaving the Counties on their own.
- There was a need for a linkage between the County and KEMSA. The County fell back into the stock-out challenges they had before the pilot County.
- The need for an alternative financing mechanism for health services became apparent to supplement the government's allocations for health. This can be made a reality by harnessing private sector capital, having more structured donor engagements, and inventing innovative ways of service delivery.

Challenges

1. The implementation of free services resulted in a rise in the overall number of persons seeking treatment. Because there was no corresponding increase in

PART 2.0: TRANSPORT, INFRASTRUCTURE AND ENERGY



H.E. Hon. Dr. Wilber Khasilwa Ottichilo, Governor of Vihiga County, accompanying dignitaries on a tour of the GTS Lab

2.1 Vihiga County Succeeds in using GIS Data to Facilitate Equitable Community Development Planning, Implementation and Monitoring

Introduction (Context and Challenge)

Vihiga County was experiencing unequal development across the wards owing to the absence of a County-level formula to distribute resources. It was, thus, difficult to objectively determine gaps in each sector without favouring a particular area. Unequal distribution of resources rendered some areas less developed than others, affecting all Vihiga County residents. Due to skewed development, there was unequal service delivery, as facilities were mainly concentrated in a few areas. For example, in health, mothers in labour would die because of not being able to get to the hospital on time. The GIS Directorate mapped all health facilities, which at the time were 63 revealing a gap of 11 additional facilities which were built to ensure residents only travel a radius of 2km to the nearest facility.

The same inequalities were found in other sectors like education, agriculture, etc. A solution to ensure equitable distribution of resources was necessary.

Implementation of the practice (Solution Path)

The GTS Lab was initially started when the current Governor (H.E. Hon. Dr. Wilber Khasilwa Ottichilo) was a Member of Parliament for the Emuhaya Constituency. It was set up to collect data within the constituency to enable the mapping and monitoring of all projects through the Geographic Information System (GIS) platform. The data was used to identify gaps in the constituency and decisions on priority projects were made based on GIS-supported evidence/facts, e.g., type of project, number of beneficiaries, impact, etc.

At the County, the GTS Lab was initially anchored in the County's Department of Lands to serve the needs of that Department alone.

To better cater to the needs of the County through evidence-based data, the GTS Lab was placed under the Office of the Governor through Executive Order No.



Director Olando explaining an aerial map of Vihiga County

1 to serve all departments and subsequently launched in May 2019. The Director of Vihiga GTS Lab, a trained GIS expert, runs the Lab operations under the direct supervision of the Chief Officer, Public Service) who in turn reports to the CECM (Public Service). The CECM (Public Service) reports to the Governor. Because the Lab is under the Governor's Office, departments, through their lead officers, are more than willing to provide data and information to the GTS Lab for processing.

Key activities

In 2017, when Governor Ottichilo took office. A GTS officer manned the GTS Lab under the Director of Lands. The Governor was informed that the GTS unit was responsible for land mapping. The County Governments Act, 2012, Clause 105(f) requires counties to establish a GIS-based database system. Since the Governor wanted to use GIS technology to map what was there in each sector and analyse it for gaps, he sought to establish it in his Office to serve the whole County Government rather than a department since one department cannot give reports to another department. The Governor presented the idea to County Executive Committee Members (CECMs), who supported it.

So, 2017 marked the beginning of the Geospatial Technology System (GTS) Directorate in the Governor's office when H.E. Hon. Dr. Ottichilo first took office. The Governor's office is the apex of information from all county departments. The GTS Directorate now gives reports to the whole County Government.

Key implementers and collaborators and their roles

The key implementer was the County Government of Vihiga through the GTS Directorate in the Office of the Governor. Other departmental lead officers provided information to the GTS Directorate and received analysis from the Directorate after mapping.

Later, the County Government received support from various development partners, including Airbus, ESRI, LocateIT, and Food and Agriculture Organization. Specifically, ESRI, an international GIS-mapping software, provided the GIS software at a subsidized price, while LocateIT provided GIS software setup at a subsidised price. Airbus helps get aerial images, and FAO provided an A0 map printer on 16th May 2019, two weeks before the GIS Lab commissioning. The printer is capable of printing, plotting and scanning maps. GIS functionalities require computers with 16GB RAM and 4TB hard disk.

Resource Implication

The Lab was set up at the cost of KSh20 million and runs on a modest budget of KSh17 million per year.

Sustainability

The GTS Directorate receives an allocation from the County Government each financial year.



An aerial view of Hamisi Sub-county showing deforestation concentration in the middle

By using the GIS platform, the County aims to become a model user of ICT and Geospatial Technologies in planning and decision-making processes in the country

Because of the accruing benefits so far, the community has embraced GIS in prioritising projects, which guarantees its continued use.

GIS enables the equitable distribution of resources across all the Wards instead of implementing projects only where certain politicians come from. GIS runs a buffer, and a decision is made.

Results of the practice

- Mapping of Sectoral projects per year is being done for equitable support.
- The first administration of Vihiga County at the beginning of devolution (2013–2017) constructed 12 ECDEs. Mapping of ECDEs has enabled Governor Ottichilo's administration (2017–2022) to construct 8 ECDEs per ward (there are 25 wards) but 9–10 ECDEs in wards that have many pre-primary school pupils.
- Distribution of scholarships is also mapped to enhance fairness. Scholarships mapping has brought on board 375 students on the Vihiga County Government scholarships.
- From the mapping of TVET institutions in the County, a gap of 2 more TVETs in Emuhaya and 1 in Hamisi was identified and will be addressed.
- Health facilities mapping is done to determine and bridge gaps. Mapping of pregnant mothers has reduced fatalities as more mothers deliver in hospitals. Initially, an average of 20 mothers per month would lose their lives due to non-skilled births/delivery, but at the time of capturing information for this story (June 2022), only 1 had passed on in the last 6 months. This is attributed to GIS which maps all pregnant mothers, and information is given to trained and equipped Community Health Volunteers stationed in each village and attached to health facilities. The CHVs visit the pregnant mothers at their homes, and through a Smart Health App on the CHVs' work smartphones, they capture essential bio-data and send it in real-time to the Sub-county database, which verifies it before sending it to the County. With the metadata created, the App generates information such as ante-natal clinic appointments, CHV visits, etc. On each CHV visit to the home of the pregnant mother, more data is collected and relayed upwards. CHVs are trained and equipped to treat minor illnesses during their visits. They refer complex illnesses to the nearest health facility. In February and March 2022 alone, pregnant mothers in Vihiga County totalled 2,635. This information is helpful to the Health Department for planning and decision-making. For example, through Ottichilo Care, pregnant mothers are given KSh1,000 at every Ante-Natal Care (ANC) visit, and on delivery, they get a Mama Pack and free clinics

for the baby for the next 6 months. The mothers' mapping helps identify the nearest health facilities to refer them for ANC and/or emergency medical attention. It also helps to allocate enough resources for Ottichilo Care and other services to the mothers.

- During the COVID-19 period, the County Government mapped the hotspots, entry points, isolation centres, screening centres, etc. This information helped in quick decision-making and response.
- To boost quality health provision, herbalists have been mapped to determine the types of patients and diseases they treat.
- Currently, AMREF is utilising the Vihiga GIS Lab to undertake disease surveillance in Vihiga, Kakamega, Bungoma and Trans Nzoia Counties.
- Water projects, including water tanks, metered households, water kiosks, and Maseno, Lunyenyeri, and Kaimosi Water Schemes, have been mapped to inform decisions on closing the water access gaps. Mapping rivers and water towers have helped establish their capabilities and life span to improve them.
- Aerial mapping of Vihiga County has established ongoing deforestation of Maragoli Hills. Reforestation plans are underway.
- The road network has been mapped to establish gaps in all-weather, murram and tarmac roads.
- To enhance security in markets, floodlight mapping was done.
- Businesses' mapping has enhanced revenue collection by distinguishing those that have paid and those that have not.
- Gap analysis for investor interest – the information gathered is shared with investors who show interest in investing in Vihiga.
- Agriculture mapping is done for funding support - smart agriculture, leaf vegetable agriculture, cooperative agriculture, and sector agriculture (livestock, livestock products, fisheries, fisheries products, etc.).
- Individual farmer registration for subsidy on farm inputs.
- Google is piloting a digital addressing project in Kisumu and Vihiga Counties using the Vihiga GTS Lab human resource. Digital addressing gives digital and physical addresses of roads, schools, businesses, homes, etc., using longitudinal and latitudinal coordinates. This project aims to replace postal addresses (P.O. Box). The digital addressing project, which started in December 2021, was finalised in July 2022. Local youths were engaged in

fixing the address plates on the walls of the mapped properties.

- Digital addresses are helpful in online ordering and delivery of goods and services ordered online.
- During emergencies such as a fire, the affected can send the digital address codes made up of longitudinal and latitudinal coordinates (e.g. 3PMC+GPJ Vihiga County) to the Fire Department for faster response.
- Health facilities can use digital addresses to deliver drugs to patients or to send ambulances to those in need, e.g. pregnant mothers in labour. They can also order drugs and blood to be supplied by drones to their precise locations, as in Rwanda using Zipline. The Lake Region Economic Bloc (LREB) is set to visit Rwanda for benchmarking.

Key activities undertaken that ultimately led to positive results include:

- Buy-in of top management.
- Information support from other departments.
- Use GIS data during public participation forums to determine project priorities in each sub-county.

Lessons learnt

A GIS lab may seem expensive to start but cost-effective in the long run. For Vihiga County, everything worked as planned.

Challenges

Counties wishing to establish GIS labs must be cognisant of these common challenges:

- Insufficient Human Resources because of the few GIS professionals in the country. Currently, there are only 6 staff at the Vihiga GTS Lab, while the ideal number of staff required is 17. Local universities such as Maseno University, Dedan Kimathi University of Technology, Jomo Kenyatta University of Agriculture & Technology, and Moi University are training GIS specialists. The Vihiga County GTS Lab gives internship/attachment opportunities to these students.
- In the beginning, i.e., 2017, there was a lack of buy-in to the GIS initiative by County staff and politicians, as people preferred seeing tangible results. However, to change the perception, the County



Mr Washington Olando, the Director of Vihiga GTSLab explaining a map to staff from other counties on a benchmarking tour

invested in sensitising the top management and the County Assembly on how GIS works. The GTS Lab prints maps which it uses for a demonstration to the residents during public participation on, say, determining priority projects. This aids their understanding and decision-making.

- Inadequate funding. The Vihiga County GTS Lab currently runs on an annual budget of KSh17 million, while it requires KSh30–40 million to function optimally. The County has been bridging the gap by approaching donors with sector proposals. For example, for Ottichilo Care, County Government put in three-quarters of the funds while UNICEF topped up the remaining quarter.

- The CoG should have a GIS Coordination Unit to offer capacity support (finance, technical and infrastructural) to Counties to set up GIS labs.
- All County Governments should establish GIS labs to support planning and decision-making as outlined in the County Governments Act of 2012 (Clause 105(f)). So far, 25 County Governments have visited Vihiga County to benchmark, out of which 16 have shown interest in setting up GIS labs.
- Counties should avoid anchoring the GIS Lab in the Department of Lands because it will only be helpful to that Department alone.

Recommendations

- GIS is a great platform to enhance the use of data and information in sustainable development, planning and decision-making processes. The Vihiga GTS Lab is ready to handhold other Counties seeking to replicate the model at a fee.
- From its experience in using GIS and the gains so far, the County Government of Vihiga recommends the following:
- The country should have a fully-fledged GIS lab in the Office of the President under the Service Delivery Unit (SDU) to monitor all projects in the country.

Further reading:

1. County Governments Act, No.17 of 2012
2. County Government of Vihiga website
<https://vihiga.go.ke/>

County Government of Vihiga
<https://www.facebook.com/vihigacountygov/>



30-meter cubic biogas digester at Malindi High School and Kombeni Girls

2.2 A Journey towards Developing Renewable Energy in Kilifi County for Environmental Conservation and Improved Standards of Living

Introduction / Context

Energy is a shared function between the National Government and County Governments. Under provisions of the Energy Act of 2019, County Governments are responsible for the development of renewable resources within the Counties. With different Counties undertaking this responsibility at different levels, Kilifi County has taken notable strides in harnessing renewable resources. This comes after a battle with deforestation for charcoal burning among most households in the County. Frequent kerosene use has also resulted in multiple health complications and fire incidents. With no lighting system in the local markets, it has been hard to conduct business within the County for fear of insecurity.

Implementation of the project

To deal with these challenges, Kilifi County has established an Energy Unit which is currently headed by an Assistant Director of Energy. The Unit has a total of ten technical officers with seven of them heading Energy units in the seven sub-counties — Ganze, Magarini, Kaloleni, Kilifi North, Kilifi South, Malindi and Rabai.

The County Government of Kilifi has launched over 60 renewable energy projects from 2018 to 2022. Notable projects include Energy and cash transfer Mwangaza Mashinani, in which the County government collaborated with the Ministry of Social Protection, Energy4Impact and UNICEF to install 3,000 solar home systems in households and residences of vulnerable members of the community, including orphans, widows and the elderly. The County worked with the partners by first identifying the areas that needed immediate attention, most being regions prone to high insecurity cases. After mapping the target areas, both the County and partners drafted key solutions, and lastly, the County identified relevant workforce and technical teams to help actualize the initiative. The project has installed 62 electrical floodlights, 200 solar streetlights and 100 solar high masts in market centres.

In partnership with the Energy4Impact through the Green Climate Fund (GCF), 3,000 improved jikos [stoves] have been distributed across Kilifi's seven sub-counties. The County has also trained youth and women groups on the production of briquettes to avoid deforestation and air pollution caused by charcoal burning. To achieve this, Kilifi County has donated briquette-making machines to local youth polytechnics across all sub-counties. Through the donated machines, different youth and women groups have collaborated in selling the briquettes hence generating extra income.

The County Assembly has enacted several laws, regulations and policies to promote the adoption of

clean energy. Some of the key policies are the County Energy Bill, County Energy Regulation Manual, Wood Fuel Regulations and the County Energy Policy. Through the development of a GIS Energy Database to map renewable resources distribution, the County has been able to plan the management, development and utilization of its energy resources in all sub-counties.

Sustainability

The County aims to create more awareness on the use of biomass and other renewable sources of energy by training residents on the importance of adopting clean energy and environment conservation. Through training youth and women groups involved in briquette making as ToTs, the County aims to induct more people into the environmental conservation initiative. With laws and regulations passed by the County Assembly of Kilifi, residents are aware of the consequences involved when one makes a choice to either burn charcoal or go against a policy. The set policies are to guide and make existing and future initiatives sustainable and recognized by law.

Results of the practice

Through sensitization, residents are aware of the benefits of using renewable sources of energy for climate conservation.

With the donated briquette-making machines, both women and youth groups are able to earn extra income for their families.

With policies like Wood Fuel Regulation, residents are aware of the consequences of charcoal burning. This understanding of the consequences associated with breaking the law has reduced the rate of deforestation for charcoal burning.

The installation of street lights has improved security and encouraged people to do business at night, hence achieving a 24-hour economy in the County.

Lesson Learned

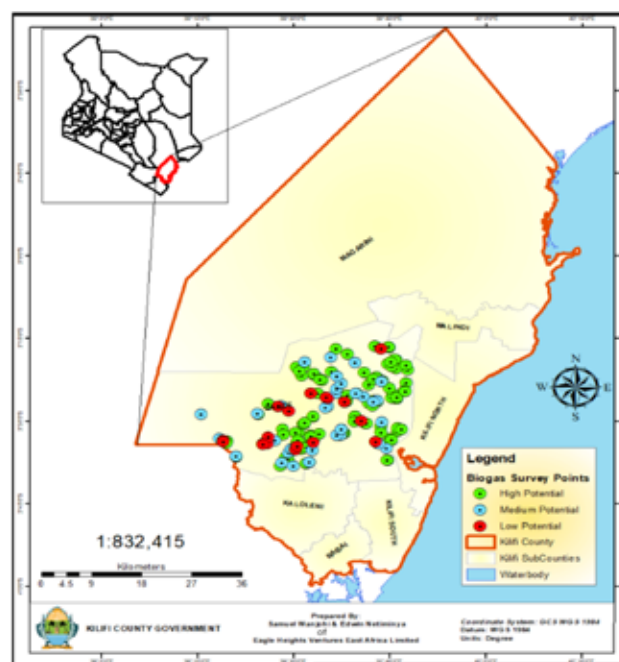
Proper planning of projects before and during implementation, including timely procurement, is important to avert delays.

There is a need to create awareness among communities on existing County government processes towards renewable energy to avoid rejection by residents.

There is a need for the County government to work closely with the private sector and other energy stakeholders to implement more initiatives that support the use of renewable sources of energy.

Recommendations (Conclusion)

The adoption of renewable sources of energy is one of the ways to conserve the environment and deal with climate change. The earlier Counties embrace renewable sources of energy, the better for the sake of health aspect and other factors. Investments in the energy sector will not only provide energy security but also improve the whole chain of economic activities in the County, leading to wealth creation, job creation and overall improved living standards for the people. The clean-cooking technology is no longer a project but a strategy for women and youth empowerment in society, hence the need for a collaborative effort between County government and non-governmental agencies towards implementation of similar projects aimed at improving livelihood.



GIS Map for Households with Potential for Installation of Biogas Plant in Ganze Sub-County, Kilifi County

Further reading:

1. Energy Act of 2019 <https://www.epra.go.ke/download/the-energy-act-2019/>
2. Kilifi County Official Website <https://kilifi.go.ke/22-27/>



The solar panels which capture the sun's energy and convert into electricity

2.3 Vihiga's Kaimosi Water Project Uses Solar Energy to Reduce the Cost of Producing Quality, Accessible and Affordable Water for All

Introduction (Context and Challenge)

The County of Vihiga operated on an old water pump system that was started in the 1940s which could not effectively treat the high turbidity¹ of water that came from the Kaimosi Dam. It provided 1500m³ of water per day.

Following devolution, towns emerged and water supply became a major challenge following the construction of more schools, hospitals and other facilities. The water scheme serves Kaimosi and the surrounding areas, Shamakhokho and the surrounding areas and Mago towards Sabatia. The population in these areas is steadily increasing with the growth of market centres like Cheptulu, Shamakhokho and Mago, and learning institutions, among them, Kaimosi Friend's University College, Kaimosi Teacher Training College, Kaimosi Girls' Secondary School, and several primary schools. Health facilities have also come up.

The increasing population in these institutions increased the water demand. The utility could not, therefore, satisfy its customers with adequate water of good quality, and resorted to rationing water. For example, during power disconnection or blackout, pupils and students would go to nearby rivers and springs to fetch water, thus affecting

their class hours. Businesses like hotels and kiosks would lack water, affecting them economically.

The County, therefore, had to commit to providing safe and clean water, noting that water service provision is a devolved function and access to water a human right.

Implementation of the practice (Solution Path)

- Staff at the County Government of Vihiga brainstormed on ways to expand safe water provision to its residents and settled on establishing an additional water scheme, the Kaimosi Water Scheme. The water comes from the Kaimosi Dam into the treatment station.
- Before the project was done, elaborate public participation was undertaken to agree on where pipes would pass, markers, tanks (elevated and pressure) in schools and hospitals, etc. In addition, through Environmental Impact Assessment (EIA), the persons to be affected by the project were identified and compensated through the Resettlement Action Plan (RAP).
- The County, through the national government, received funding from Belgium, which was managed by the Lake Victoria North Water Development Agency, a partner they worked with to deliver the new water project designed to serve water in the entire County of Vihiga.

¹Turbidity is measure of the degree to which the water loses its transparency due to the presence of suspended particulates (ScienceDirect.com)



Lagoon for sludge water during water treatment

- The County Government provided part of the land and technical support before, during, and after implementation. The County was also the beneficiary of the project through its water utility company, Amatsi Water Services Company (AWASCO) which ultimately took over management of the project after construction of the new water treatment station. The County has 100% shareholding ownership of AWASCO.
- The Presidential Delivery Unit provided sector-wide coordination and oversight during implementation.
- Water Resources Authority provided a permit for abstraction from the river.
- The new station runs sustainably on green/ renewable energy — solar and hydropower — and gives cleaner water.
- The new system provides 2500m³ (2.5 million litres) of water per day. This caters to 80% of the demand. The 20% is obtained from boreholes, local springs, shallow wells and rivers.
- There are 250 solar panels each producing 265 Watts, which is equivalent to 70 kilowatts of energy; the current energy demand for pumping the water is only 50 kilowatts per day. The electricity bill is now at KSh 250 000 per month (50% less than before) as the system can run 2 machines on solar during the day and pump using electricity from the national grid at night.
- KENGEN, Vihiga County and the Ministry of Water undertook a feasibility study to complete the Kaimosi mini-hydro power plant.
- The Kaimosi Water Scheme is one of three in Vihiga County and serves Kaimosi as well as Maseno University and Yala. Others are Lunyenyeri (Mbale) Water Scheme and Maseno Water Scheme.

Resource implications

The Government of Kenya and the County Government of Vihiga provided land for project implementation and technical support during implementation. The Belgian government provided funding worth KSh 1.7 billion for three water schemes, i.e. Kaimosi, Mbale and Maseno water supplies.

Sustainability

Future plans to sustain safe water provision in the County are:

- To expand the system to 100% water provision — the budget for the 3 water schemes is KSh 1.7 billion.
- A feasibility study done with KenGen established that KSh 150 million is needed for the completion of a mini-hydro power station where civil works were done, with only electromechanical works remaining to finalize the project. Resource mobilisation is ongoing

- A proposal for KSh 270 million was submitted to the National Government for the last-mile water supply. Piped connectivity is at 20%. In FY 2020/2021, KSh 50 million was allocated for water distribution while in 2021/2022, KSh 20 million was allocated.
- The old water pumping station is to be rehabilitated as a standby backup.
- Zero cost of production by investing more in mini-hydropower to pump at night and solar energy during the day to reduce electricity costs (KPLC bills) and have lower water tariffs for residents. There are plans to buy more land for solar panels and to maintain low overhead costs.
- To sell excess power to the national grid to offset KPLC bills.
- To get a license to sell power to residents.
- To have all boreholes solarised — currently, 2 are fully solarised.
- To get water through gravity from Nandi County which is 3 kilometres away.
- To achieve SDG 6 by ensuring that water is clean, safe, accessible and affordable to all.
- The County is currently doing a MoU with Kisumu County to sell water in bulk.
- Construction of pump houses and installation of pumping sets
- Installation of solar panels to provide solar energy for pumping water as an intervention to reduce the high cost of electricity
- Laying of rising main pipelines from treatment works to storage tanks
- Construction of storage tanks

Lessons learnt:

What worked really well

- Public participation was done well and the citizens, including those whose land was affected, supported the project. Community conflicts were well managed.
- The parties in the project had regular project meetings and reporting and technical decisions were consultative.
- The technical standards were upheld and quality of works was highly achieved.

What did not work and why

- The Kaimosi dam is colonized by microphytes and heavily silted and therefore requires to be desilted to increase reservoir water capacity. Desilting will cost KSh 300–500 million.
- The hilly topography in the County makes it challenging to supply water without pumping, which leads to a high cost of electricity. This calls for considering alternative and cheap energy supply with the priority being renewable energy — hydropower and solar energy, which will make the water services resilient and sustainable.
- COVID-19 affected implementation during the tail-end of the project and caused delays in the completion of the project.

What would be done differently

The project did not provide for last-mile connectivity. In the future, this should be done to ensure the County realizes immediate impact on water service provision.

Results of the practice (outputs and outcomes)

- Water coverage in the County is currently at 60% (both piped and unpiped, e.g. boreholes and protected springs), up from 40%. The Water Services Regulatory Board (WASREB) puts piped water coverage at 20%.
- The primary uses of the dam include a mini hydropower station, drinking water, recreation and irrigation.
- Before the use of solar energy, the County would pay KSh 500,000 to KPLC to pay for electricity bills for water pumping in Kaimosi. The cost has now gone down by half to KSh 250,000 a month.

Project activities that yielded positive results entailed:

- Rehabilitation of intake works
- Construction of gravity mains
- Construction of treatment works

Recommendations

Advice to those seeking to replicate the model

- Public participation in any project is vital before, during, and after implementation. Counties should undertake comprehensive community participation
- A comprehensive feasibility study should be done to take advantage of all available project alternatives to exploit and ensure sustainable measures are undertaken for long-term gains.
- Coordination of relevant sectors in the implementation of projects is key to surmounting challenges in the project.

What to avoid

- Delays caused due to the shipment of equipment to avoid high demurrage costs.
- A traditional conventional treatment system that requires more land space.

Further reading:

1. County Government of Vihiga, "The Promise Delivered": World Water Day 2022, *The Standard*, March 22, 2022
2. Vihiga County social media pages



A set of four new pumps connected to hybrid energy supply (solar and electricity)



Old plant sedimentazione basin



Sand filters with draining pipes



Clear water tank with a dosing unit on top

PART 3.0: AGRICULTURE



Mwitoko Fish Farm employees showcasing 5kg catfish harvested from the farm

3.1 Mwitoko Fish Farm Project Empowers Fish Farmers in Vihiga and its Environs for Sustainable and Profitable Aquaculture Businesses.

Introduction (Context and Challenge)

Farmers in Vihiga had no source of certified fish fingerlings. They would get the fingerlings from distant hatcheries outside the County as well as from other uncertified sources. The Mwitoko Fish Farm project was started during the Economic Stimulus Program between 2009 and 2011 with only 10 earthen ponds at the time, to provide certified fingerlings to farmers in Vihiga.

The lack of a good source of quality fingerlings locally forced fish farmers to source them from distant areas such as the Dominion farm in Siaya. Some farmers were sharing poor-quality fingerlings from their low-performing ponds, leading to losses. Residents were also not getting quality fish locally, thus affecting food security and nutrition.

Implementation of the practice (Solution Path):

To solve the problem of quality and certified fingerlings, the County Government of Vihiga started the Mwitoko Fish Farm Project at Wemilabi Ward in Luanda Sub-county, Vihiga County and named it Mwitoko Hatchery and Aquaculture Training Centre, whose main mandate is to produce Nile tilapia and the African catfish fingerlings for farmers within and outside Vihiga County.

The project was implemented by the County Department of Agriculture with funds from the County Government of Vihiga. The farm was designed by Mr. Wilson Munala who is the current Director of Fisheries in Vihiga County.

Following a need to expand the fish farm to a modern aquaculture facility for better fingerlings and services, the facility was expanded between 2017 and 2019 under the second Vihiga County Integrated Development Plan (CIDP) guided by the Mwitoko Fish Farm five-year Development plan of 2017-2022. It was officially launched on 1st July 2019. This increased the capacity of the fish farm from 10 to 31 ponds which are used for the production of African catfish and tilapia fingerlings.



Aerial view of Mwitoko Fish Farm



Ground view of Mwitoko Fish Farm

During this phase, several activities were undertaken, including:

- i. Re-designing of the water intake system, supply lines and drainage for an efficient and effective flow of the water through the farm.
- ii. Construction of more ponds to increase the capacity from 10 to 31 with 24 of the ponds being lined with the recommended PVC liners.
- iii. Stocking of the ponds with fish for multiplication and fingerling production.
- iv. Initiation of a Fish Farming Productivity Program (FFPP) in the County.
- v. Construction of sedimentation and water filtration ponds to clean the water at the exit point from the farm conforming to NEMA requirements. All the water exiting from the farm must go through these ponds for mechanical and biological filtration before being released back into the stream.
- vi. Construction of an indoor hatchery with increased capacity and facilities to handle a high volume of fingerlings during incubation and/or processing of the fingerlings for sale.



Students taking part in a harvesting exercise as part of the school learning visit

- vii. Construction of a high-capacity water reservoir tank for the hatchery.
- viii. Construction of a farm store and workshop.
- ix. Introduction of bamboo and other water-friendly trees on the farm as part of environmental protection, conservation and management. There is a riparian section of the farm on the upper part of the water intake through which the water flows from the source before reaching the weir.
- x. Improvement of the security of the farm through fencing with chain link mesh wire and installation of solar and electricity flood lights.
- xi. Landscaping and setting up a parking area for vehicles.

The farm has two types of ponds which are used for different stages in the production of fingerlings: 7 earthen ponds and 24 PVC-lined ponds.

In addition, the project established a standard weir (controlling the water that goes to the farm and a modern hatchery which currently handles a high capacity of fingerlings (about 50,000–100,000 fingerlings per month).

Artificial propagation of catfish and sex reversal (from female to male) of tilapia is done at the facility. Males are preferred as they feed less and grow faster and bigger, hence ideal for commercial purposes.

Currently, apart from selling subsidized fingerlings, the farm offers training services, extension services, research and demonstrations and attachment/internship opportunities for students. The facility also serves as a link between the innovators (researchers and universities)

and the end-users (farmers and the value-chain players) of the innovations/technologies. Some of these institutions include Maseno University, Moi University, Masinde Muliro University of Science and Technology (MMUST), Kaimosi Friends University College (KAFUCO), Bukura Agricultural College, Animal Health and Industry Training Institute (AHITI), and Kisii University, among others. The farm further works with other key players within the aquaculture sector.

The farm is engaged in mentorship for school students to nurture aquaculture champions and also assists schools to establish aquaculture clubs. This is done through visits to the schools and school visits to the farm for practical demonstrations.

Although the farm operates with a skeleton staff, the technical staff is highly skilled in technical operations and works closely with other staff within the Directorate of Fisheries and the Department of Agriculture in Vihiga County and beyond.

The farm ensures sustainable production as solar power complements the main electricity in lighting the hatchery and the farm and the water naturally flows by gravity through the farm. This has helped to reduce operational costs at the farm.

Resource implications

Establishment of a fish farm such as the Mwitoko Fish Farm is a worthwhile venture. The Mwitoko Fish Farm project cost close to KSh 40 million (infrastructure and equipment). According to the Director of Fisheries, Counties wishing to replicate this initiative can invest KSh 25–50 million. With proper funding, such a project can take at least 2 years to complete. It may take more time depending on cash flow and other factors.

Sustainability

To sustain the farm, the County Government has plans to increase fingerling production and diversify services.

Sustainability plans include:

- Increasing fingerlings production from the current levels to about 1.2 million per year.
- Establishing an aquaculture training facility for farmers and students.
- Construction of an administration block, hostels to house trainees, staff houses, and conference facilities to handle the increasing demand for training and technical operations at the farm.
- Establishment of a library at the farm to serve the staff, County Government officers, trainees and the community.
- Introduction of a section to serve as a demonstration site for technologies such as aquaponics and increase the capacity for nursing from the fry² stage to the fingerling³ stage.
- Offering other services such as demonstration of agricultural technologies, partnering with other organizations in research and development and on-farm trials.

Results of the practice (outputs and outcomes)

- Farmers now get quality and certified fingerlings at subsidized prices which has resulted in increased production and productivity.
- Better quality fingerlings sourced from the farm has contributed to better food security and improvement of the economy of the local communities. Currently, the fish farm supplies the fingerlings to five Counties, namely Vihiga, Kakamega, Siaya, Kisumu and Busia.
- There is an increasing number of farmers undertaking aquaculture as a business with high production capacity as a result of the Mwitoko Fish Farm.
- Creation of employment for members of the community who are engaged at the farm to perform various activities.
- The establishment of the farm in the area led to electricity being brought closer to the communities

neighbouring the farm which in turn resulted in improved security within the area.

- The establishment of the fish farm at Mwitoko led to the opening up of the area with an improved and well-maintained road network.

Key activities undertaken that led to positive or negative results

- Sourcing of brood stock from accredited farms has resulted in the production of better-performing fingerlings for improved fish productivity and profitability
- The farm has established a close working relationship with the farmers who are the major clients and the surrounding community for improved services.
- The employment of highly skilled technical staff at the farm has led to efficiency and assurance of quality for the fingerlings produced.
- There is a growing demand for Nile tilapia sex-reversed (monosex) fingerlings by farmers across the region because of their better performance compared to the mixed-sex variety.
- The uptake of catfish farming is low, although the number of farmers engaging in the production of catfish has begun to rise.

Lessons learnt:

What worked well

- Mwitoko Fish Hatchery and Aquaculture Training Centre is the largest County Government-owned facility in Kenya.
- The farm is very keen on the quality of fingerlings produced and only sources brood stock from government-certified facilities/suppliers such as Sagana Aquaculture Centre from where the current brood stock in use was sourced.
- Working with other hatcheries, development partners, research institutions as well as both government and non-governmental organizations has led to the creation of synergies in the improvement of food security through the aquaculture sector.

²Fry: The first development stage of fish, after hatching. Has less defined features and depends on the yolk during the first few days.

³Fingerling: The second stage in the development of fish after hatching. It has well defined features and larger in size

What did not work and why

- Insufficient human resource — currently there are 3 officers only — 2 technical and 1 support staff trained to carry out some of the tasks although plans are underway for the engagement of more staff by the County Government of Vihiga.
- Lack of transport (vans and motorbikes) to deliver the products to farmers.
- Lack of transport for staff who work at odd hours due to the nature of the job.
- Predators such as the Marabou Stock and Kingfishers.
- Change in weather, especially during the cold and rainy seasons, affects the production of fingerlings, leading to losses and/or reduced production.
- Heavy rains with hail stones often damage the PVC-lined ponds, necessitating frequent repairs.

Recommendations (Conclusion)

- It is important to establish a healthy working relationship between different actors and sectors of the economy as well as government institutions as they are all linked in the efforts towards achieving food security, improved nutrition and improvement of the economy at both community and national levels.

Further reading:

- Dr Wilbert Khasilwa Ottichilo, EGH on Twitter <https://twitter.com/GovernorWKO>
- Vihiga County Integrated Development Plan 2017–2022
- Mwitoko Fish Farm Five-Year Development Plan: 2017–2022

3.2 Garissa County Mitigates Livestock Death Due to Drought by Innovating Unique Cattle Feed

Introduction

Garissa is a County in Northern Kenya with a population of 841,353 people according to the Kenya National Bureau of Statistics (KNBS) 2019 census, and a land area of about 44,753 km². The Northern part of Kenya, like any other arid or semi-arid region in Sub-Saharan Africa, has greatly suffered a lack of sufficient pasture for livestock.

The pastoral communities in Garissa County continue to experience drought which results in animal death. In 2022, the County lost over 2,000,000 livestock from a lack of pasture. Pastoral communities in the County depend on cattle-keeping both as a source of income and for prestige. Farmers with large numbers of livestock are considered rich, powerful and prestigious.

With water shortage, the communities move from one place to another, meeting with other pastoralists in charge of large and small herds but all in search of pasture. For women, this pastoral culture has sometimes led to sexual and gender-based violence as most of them are raped and sexually abused trying to fend for their livestock. Young and energetic school-going boys are forced to drop out of school to herd cattle. To mitigate these negative effects, the County Government of Garissa in partnership with Marifa Conner is using bones from slaughtered animals and Prosopis Juliflora tree (locally known as Mathenge tree) products to make animal feeds.

Implementation of the practice (Solution Path)

In 2019, the County Government of Garissa partnered with Marifa Conner and Mathenge Maisha (a local community group) to produce animal feed from the Prosopis Juliflora tree.

The County Department of Trade was tasked with the responsibility of purchasing bone-crushing machines and conducting capacity building amongst communities. Marifa Conner, a partner company, provided pod-crushing machines while Maisha Mathenge and other farmers provide manpower and raw materials.

The Mathenge tree was initially planted on a large scale in the late 80s to prevent soil erosion in Northern Kenya. With readily available raw materials, the County started a processing firm in 2020.

The following was the budget:

| Expense/Item | Cost in KSh |
|------------------------------|-------------|
| Bone grinding machine | 500,000 |
| Three-phase power connection | 150,000 |
| Wheelbarrow (10) | 30,000 |
| Pods grinding machine | 800,000 |
| Feeds mixer machine | 400,000 |
| Sacks (5000). | 250,000 |
| Sewing machine | 10,000 |
| Canvas (10) | 20,000 |
| Premise rent | 200,000 |

Sustainability of project

The County Government of Garissa has identified and selected public lands to plant more Mathenge trees for an adequate long-term supply of raw materials.

Monthly sensitization of local communities helps in changing the mindset, hence promoting a long-term positive perception of the initiative and fostering acceptance.

Recommendations /Lessons learnt:

- Sensitizing the local community on the innovation was key to gaining trust and motivation to try the feed. County Governments willing to adopt the innovation should consider sensitizing local communities first.
- To increase nutrients in the feed, grinding bones and adding them to the milling processes is important.
- There is a need for proper training of staff in the processing firm to learn the right mixing portions of both bones and Prosopis Juliflora to get the right feed. Just like in human consumption, food matters are very important to livestock too. Getting the right ingredients is key.

Further reading:

For further reading and reference visit both: the Mathenge Maisha website and the Garissa County website <https://garissa.go.ke/>



A sack of Maisha Mathenge animal feed

3.3 One-Cow Initiative Excels in Providing Sustainable Livelihoods and Nutrition for Vulnerable Households in Kakamega County

Introduction

High poverty levels, food insecurity, high unemployment levels, and lack of raw materials for agro-processing industries were the prevailing conditions in Kakamega County in 2013. For example, 51% of the County population of 1.7 million people was poor⁴.

Though Kakamega County is endowed with good climatic conditions for farming, a large part of the population is involved in subsistence farming, including largely rearing indigenous cattle for milk production. Milk produced from these indigenous cattle could hardly cater for household incomes and nutritional needs.

Unemployment rates were high among these poor households, many of whom could not afford school fees for their children, leave alone decent shelter for the family members.

The Participatory Analysis of Poverty and Livelihood Dynamics (**PAPOLD**) identified the following categories of population status:

- i) Destitute – no land, no animals, they beg for food
- ii) Very poor – little land, can work but have no animals (*Avamanani*)
- iii) Poor – have land, can produce food crops but have no animals
- iv) Fairly rich – have land, have some animals and a little extra income (*Kaikai*)
- v) Rich – have land, have animals and paid employment to maintain good living standards (*Avahinda*)

The County had all categories except for the destitute category. It thus needed to address the livelihood gaps and challenges facing categories (ii) very poor and (iii) poor as categories iv (fairly rich) and v (rich) were living above the poverty line.

The then Governor, H.E. FCPA Wycliffe Ambetsa Oparanya, saw a huge potential for the dairy value chain due to favourable climatic conditions and an alternative source of income to sugarcane and this led to the creation of a special-purpose programme dubbed the One-cow Initiative.

⁴Kakamega County Projects Implementation Report 2013-2017 page 3, item 1.4 – Poverty reduction efforts (March 2017).

A proposal to initiate a One Cow per Poor Household program in the financial year 2013/2014 was done. This would involve the purchase and distribution of in-calf heifers to targeted and carefully selected beneficiaries across all the 60 wards in the County. This initiative would trigger increased milk production, create on-farm employment and improve household incomes and nutrition. The beneficiaries would then pass on the first heifers from the donated cows to other selected beneficiaries within their localities.

Implementation of the practice (Solution Path)

- In the financial year 2014/2015, the One Cow Initiative was implemented/ operationalized under the Livestock Production Directorate. The main objective of the programme is to improve the socio-economic status of the farmers of Kakamega through improved and increased milk production, improved household incomes, nutrition and creation of employment.
- The One-Cow Initiative proposal included other initiatives (see Section 2.4.2, pages 18–21) such as:
 - Smart Dairies Ventures (Farm-in-a-Box) for increased milk production by acquisition of high-quality dairy cows;
 - A milk processing plant for value addition;
 - Research/training components in the dairy sector for capacity building;
 - Smart Milk Cooperatives for marketing.
- The operationalization of these initiatives led to the formation of the Kakamega County Dairy Development Corporation (KDDC) through a County Assembly Bill of 2017 as part of its core mandate. KDDC was established by an Act of the County Assembly of Kakamega in the year 2018 to provide a legal framework for the development of the dairy value chain in Kakamega County.
- The One-Cow Initiative programme has been and is still one of the flagship programmes in the Department of Agriculture, Livestock, Cooperatives and Fisheries. To sustain it, the package included subsidized Artificial Insemination.

Vetting committees established at ward and sub-county levels carefully selected vulnerable farmers. The identified beneficiaries were then trained on dairy enterprise management practices, including dairy fodder establishment and construction of units/infrastructure to shelter the cows. They were then provided with in-calf heifers and were regularly followed up by technical staff focusing on improved feeding and welfare of the cows.

- A beneficiary whose animal calved down to a heifer would pass on this heifer at one year of age to the next selected farmer/beneficiary in the locality.
- All beneficiary farmers receive continuous extension services from department staff, especially in areas of fodder development, calf rearing, clean milk production, feeding, disease and proper record keeping.

The main activities carried out

- Departmental budget preparation (program-based budgeting), specifically for the One Cow per poor household initiative.
- Presentation of the above budget to the Executive (Cabinet for approval).
- Presentation of the entire County budget to the County Assembly for budgetary appropriation.
- Formation of operationalization committees from the County level up to village levels.
- Selection and vetting of beneficiaries.
- Sensitization and training of beneficiaries.
- Scouting of high-quality in-calf heifers.
- Purchase of the identified high-quality in-calf heifers.
- Preparation of the launch and distribution of the animals with the help and participation of the executive (Governor).
- Extension officer follow-up with trainings, monitoring and evaluation and reporting back.

When and where the activities were carried out

- County government budgetary cycle — mainly in-house and office work
- Selection and sensitization activities are fieldwork with the general public
- Scouting and purchases are mainly where high-quality animals are available, for instance, ADCs (Agricultural Development Corporation) Launches, distribution, extension services, monitoring and evaluation are fieldwork activities and are continuous.

Establishment of the One-cow initiative

- The County rolled out the initiative in the Financial Year 2015/16 by procuring 610 in-calf heifers and

distributing 10 to each ward. In 2016/17, 700 in-calf heifers were procured and distributed equally among the wards. Shinyalu and Ikolomani Sub-counties were given double the number to cure the low dairy farming problem there. In 2017/18, 480 in-calf heifers were distributed with each ward getting 8.

- Beneficiaries were expected to pass on the first heifer calf to the next beneficiary and the cycle continues. So far, 1,790 in-calf heifers have been distributed to farmers across the County, 180 are in the process of being procured and 916 heifers have been passed on to other beneficiaries. Additionally, 100 heifers are ready to be passed on. Bull calves are not passed over; the farmers can sell them.
- Farmer groups maintain themselves, i.e. they monitor one another. The community has a vetting committee that carefully selects the beneficiaries based on their knowledge of the socio-economic status of those who apply.
- All farmers interested in receiving a heifer must apply through the Livestock Officer. The database of applicants is availed to the vetting committee which vets each applicant against a checklist to ensure cows are given to the most deserving beneficiaries. The vetting committee comprises church leaders, women, youth, and persons with disabilities (PWD) representatives, one representative of the Community, Area Council member for Agriculture; ward and sub-county administrators and officers from key departments such as Livestock and

Cooperative departments. Committee members ask questions to establish the suitability of a farmer to take care of the cow. Checklist questions include:

- Size of land
- Availability of water
- Whether the applicant has kept dairy before
- Subsistence crops grown within the homestead for food. Milk proceeds should cater for capital expenses such as school fees, housing, etc.
- Farmer must be a member of a cooperative.
- Farmer must commit to give the first heifer calf to the next beneficiary once it's weaned off milk.
- Phase I of the initiative ran into difficulties as some very poor farmers couldn't take care of the cows when they became sick. They would call the Livestock Office which would send vets to check on the cows and settle the bills.
- Phase II focused on women and Phase III was open to both genders and PWDs provided they applied.
- Vetting takes place at the ward level and the beneficiary list is sent to the County headquarters. The Livestock/Veterinary officers visit the beneficiary farmers at the ward level for M&E.

Key implementers and collaborators and their roles

| Implementers/Collaborators | Their roles |
|--|---|
| 1. County Government of Kakamega | Main source of funding and political goodwill |
| 2. County Assembly of Kakamega | Appropriation of the budget and oversight of the implementation of County projects. |
| 3. Directorates of Livestock Production, veterinary services and cooperative development | Logistics and operationalization of the entire programme |
| 4. KDDC (Kakamega County Dairy Development Corporation) | Research, breeding, value addition strategies and specialized training on management of grade/pedigree breeds (Farm-in-the-box Smart Dairy Farms) |
| 5. Farmers/Beneficiaries | Actual owners of distributed animals. They provided land as a resource and established fodder, constructed zero grazing units, provided clean water and feeds, and availed farm labour. They do the actual animal-rearing activities. |
| 6. Agroindustry ventures | Provide animal feeds, drugs, equipment and tools. |
| 7. National Government | Policy formulation, capacity building and technical assistance. |
| 8. Council of Governors (CoG) | Mobilization of funds from national government to be released on time and capacity building at the county level. |
| 9. Cooperative societies | Markets enhancements, income mobilization and farm inputs acquisition |
| 10. Development partners, e.g. ASDSP, KCSAP, GIZ, FAO | Harmonizing activities working on residence issue supplementary and complementarity enhancement. |

Resource implications

| Financial year | Number of heifers procured | Total Cost |
|----------------|----------------------------|------------|
| 2015/2016 | 610 | 55,450,000 |
| 2016/2017 | 700 | 50,400,000 |
| 2018/2019 | 480 | 35,520,000 |

Sustainability of the initiative

The County Government intends to sustain the One-Cow Initiative through:

- Heifer pass-ons to the next beneficiaries making the programme perpetual (from one cow, one farmer has had 6 calves — 3 heifers and 3 bulls).
 - Strengthening Cooperative societies' movement to improve marketing channels.
 - Increasing milk production in the County by transitioning from subsistence to commercial dairy farming.
 - Commercialization strategy by building a milk processing plant.
 - Creation of the Lake Region Economic Bloc by CoG where Kakamega County is a signatory and a member has increased the size of market for the region's agricultural products.
 - Full implementation of the multi-sectorial County Agricultural Sector Steering Committee (CASSCOM) to harmonize and harness resources from other development partners.
 - Continuous public participation and sensitization to capture the ownership of the initiative by the farmer-beneficiaries.
 - Enhancing the number of Smart Dairy Farms by establishing at least one smart dairy farm in each sub-county to serve as centres of excellence for dairy farmers.
 - Retaining one cow per poor household initiative as a flagship project in the CIDP with an annual budget allocation regardless of changes in political regimes.
 - Training and follow-up of beneficiary farmers.
 - Establishing an artificial insemination (AI) scheme where heifers of the same age will be synchronized and served at the same time (i.e. injected with hormones to put them on heat at the same time) for faster multiplication.
 - Encouraging able farmers to purchase high-grade animals on their own. The County Government will offer technical advice and capacity building.
- Forming synergies with other counties to explore their comparative advantages and exchange of technologies and resources, and improve on disease control.

Results of the practice (outputs and outcomes)

- Dairy population and milk production in the County is as follows:
 - In 2015, the dairy population was 147,820, producing 131.7 million litres of milk annually;
 - In 2016, the dairy population was 148,430, producing 145.8 million litres of milk annually;
 - In 2018, the dairy population was 161,030, producing 165.0 million litres of milk annually;
 - In 2019, the dairy population was 165,780, producing 171.8 million litres of milk annually.
 - In 2022, the dairy herd increased to 170,000, resulting in a 30% increase in milk production.
- Construction of a milk processing plant in Malava has not been completed due to budgetary constraints; it is currently at 70% completion. In this FY 2022/2023, a budgetary allocation has been provided to complete its construction.
- There was a noted increase in household incomes of beneficiaries that has enabled them to pay for their children's education.
- Crop yields have increased among beneficiaries due to the use of manure generated from animal units.

Impact/successes

- The initiative has reached 1,790 first-level beneficiary households and 1,016 second-level beneficiary households, and this is a continuous process as heifers of age are passed on to other beneficiaries. The County has also made a saving since it didn't purchase the 1,016 heifers.
- Farmers' nutrition and livelihoods have improved since their diet includes sufficient milk and they sell the surplus milk to neighbours. For example:
 - A (blind) farmer was given a cow, and after putting their 3-year child who had never walked on milk, the nutrition condition was corrected and the child started walking.
 - Farmers are using the proceeds of milk sales to educate their children and improve their shelters from one type to another.

- There is an improvement in yields because of manure use; the cows are zero-grazed.

Results through the eyes of a beneficiary of the One-Cow Initiative, Mr Vincent Shikombe from Sheywe Location

Vincent Shikombe who lives with his wife and 5 children, benefited from the One-Cow Initiative after he was interviewed by the Ward vetting committee and identified as one of the deserving beneficiaries. His name was forwarded to the County which gave him a cow sometime in 2015.

His cow named Susan after the Livestock Officer who handed it over, produces 24 cups of milk (equivalent to 12 litres) per day, 2 litres of which he consumes with his family and the remaining 10 litres, he sells to the neighbours.



Shikombe speaking to CoG & Kakamega County staff during a visit to his farm



Shikombe showing off the cow he got from the One-Cow Initiative as a first-level beneficiary

So far, he has got 2 calves — male and female; he passed on the heifer calf to another beneficiary as required under the One-cow initiative. The cow has enabled him to boost his family's nutrition, build a house and educate his firstborn son who is currently in college. Shikombe is grateful to the County Government for these benefits.

Shikombe grows maize, beans, peanuts, sweet potatoes, arrowroots and bananas, among other food crops. He has also started beekeeping and selling gravel broken from the rocks in the homestead.

Shikombe experiences challenges, including:

- Disease control — once the cow is infected, it has to be treated immediately.
- Drought affects the availability of feed but the beneficiary has planted grass which comes in handy during the dry season.
- The milk is only enough to sell to neighbours and not to the dairy.

Key activities undertaken which led to positive results

- Early farmer preparation before receiving the cow ensured that the farmer plants enough fodder and constructs the unit for the cow before receiving it.
- Proper beneficiary selection ensured the most vulnerable benefitted in each Ward. Constant interaction with farmers and follow-up ensures keeping track of the cows and their offspring.

Lessons learnt:

- Political goodwill facilitated the equal distribution of in-calf heifers across the County with all Wards benefitting.
- Mode of selection of the beneficiaries minimized conflicts — the selection is done at the community level with implementation guidelines.
- Constant farmer trainings by the officers facilitated the high number of heifers passed on to other beneficiaries as part of sustainability measures.
- Good collaboration with other stakeholders enabled follow-up to monitor the cows.
- There were increased incidences of mortality rate in Phase I due to high incidences of East Coast Fever (ECF) because the disease is very expensive to diagnose and treat for poor farmers. The County government had to intervene by:
 - procuring some doses of ECF drugs for use by the resource-poor dairy farmers in the programme.
 - purchasing 60-foot pumps (one per Ward) to enable comprehensive spraying of animals to eliminate ticks. However, this is very expensive for the low-productive zebu cattle that would spread the effect of ECF to the program animals. Hence, there was the need for rehabilitation/construction of cattle dips and spray races in the County (ongoing).

- training veterinary staff on ECF vaccination.
- carrying out free ECF vaccinations in the County for all programme cattle. This offers lifetime immunity against ECF.

What to do differently

- Enhance tick control initiatives and vaccinations against ECF.
- Veterinary extension services are to be initiated and enhanced by the County government. Initiate synchronized Artificial Insemination services using advanced technologies of sexed semen and embryo transfers.

Conclusion and recommendations

- Good targeting of vulnerable beneficiaries can transform household incomes and nutrition.
- The beneficiaries should be well-trained on the dairy value chain before they are given animals.
- The requirement to pass on one-year old heifers brings ownership to beneficiaries since passing on is looked upon by farmer peers as clearance of a “debt”.
- There is a need for proper coordination among all stakeholders at all levels of project implementation, taking cognizance of the political environment.
- There is a need to have effective, efficient and accountable vetting committees at the Ward levels with proper reporting mechanisms.
- There is a need to develop value-addition strategies and marketing channels/linkages as milk production increases.
- Farmer field exchange learning visits help farmers share knowledge and skills in adapting to changing circumstances in the rearing of the cows. Farmer feedback mechanisms through extension services

What to avoid

- Uncoordinated implementation of the programmes.
- Political influences by having committees work independently under proper regulations.

Further reading:

1. One Cow Initiative Program Proposal – County Government of Kakamega

Initial County Government of Kakamega CIDP document



Heifer pass-on exercise in Likuyani Sub-County

PART 4.0: GENDER, YOUTH, SPORTS, CULTURE & SOCIAL SERVICES



Hope GVRC Centre Opening

4.1 Homa Bay County Mitigates Gender-Based Violence through Community Sensitization and GBV Centres

Introduction

Homa Bay County is located along the shores of Lake Victoria in western Kenya. It covers an area of 3,183.3km². The County has a population estimate of 1,244,597 (641,163 females and 603,437 males).

Between 2017 and 2020, Homa Bay County witnessed a rising steady trend of Gender-Based Violence (GBV) cases, as follows: 2017 -72 cases; 2018-216 cases; 2019-323 cases; and 2020-390 cases. With the breaking of the COVID-19 pandemic in 2020, the number of GBV cases escalated.

County facilities had a challenge in offering comprehensive GBV services. Health facilities at level 2 offered services at 51%, level 3 at 30% and level 5 at 19%. These statistics prompted the County Health Department to think of an initiative to mitigate the effects of the rising GBV cases in the County.

The population most affected was and still is 1-15 years, mostly of female gender. GBV has been linked to the rising cases of HIV infections (51% among adolescents), teenage pregnancies (33% among adolescents), STIs, unplanned general population pregnancies, physical impairments, school dropouts, domestic conflicts, and mental illness such as Post Traumatic Stress Disorder and depression.

Despite, the Department offering GBV services in a few select facilities, from the data available, it was realized that the community level involvement was wanting, incorporation of mental health interventions was minimal, health workers' capacity to offer GBV services was inadequate, poor referral/follow-ups and uncoordinated sectoral (Children's Department/Judiciary/Police/Rescue Center etc) linkages.

The above situation called for immediate action. After a series of consultations involving the Homa Bay County Health Department, the then County Woman Representative (current Homa Bay County Governor, H.E. Hon Gladys Wanga) and GVRC (Gender Violent Recovery Center at Nairobi Hospital) initiated the Homa Bay GBVRC (Hope Centre).

The idea of the Centre was prompted by a helpless case of a female minor, defiled at Shauri Yako estate, whose situation attracted the attention of major GBV stakeholders including, H.E. Gladys Wanga (then County Woman Rep), Ministry of Health, State Department of Gender, State Department of Youth, the police and others. This case demonstrated the glaring gaps in the County's ability and capacity to manage SGBV cases comprehensively.

Implementation of the practice

The County Government of Homa Bay had an existing space dedicated to helping GBV survivors. Through a partnership with Gender Violent Recovery Center at Nairobi Hospital, the existing space was renovated and Hope Centre was established. The County hired and deployed specialized personnel relevant to GBV (psychologists), clinical management/psychosocial management, forensic management and first-line support.

Further, the County conducted community sensitization on mental health via radio and offered treatment, psychotherapy and follow-ups of general /GBV-triggered mental health conditions at no cost. With the help of Community Health Volunteers (CHVs), the County identified survivors and created awareness.

The County integrated sexual and reproductive health-friendly services like family planning services, STI management and HIV counselling.

Results of the practice

During the two years, there have been significant positive outcomes and outputs as stated below:

1. Significant rise in GBV-reported cases from an average of five patients monthly in 2020 to an average of 15 patients monthly in 2022.
2. 30 youths trained in GBV/mental health
3. 50 HCWs trained in GBV/Mental health services provision and practising
4. 80 CHVs trained in GBV/Mental health and practising
5. 20 GBV survivors linked to other GBV services providers
6. 10 GBV perpetrators processed and evidence submitted to court

7. All GBV survivors receive psychosocial support and follow up
8. All epilepsy cases receive expert services
9. 10 medical students have received mentorship and training on GBV
10. The number of general patients seeking mental health services and epilepsy services has increased significantly.
11. Improved referrals of SGBV cases from the community by the Community Health Volunteers.
12. Self-referral from school pupils was also noted with one case reporting with her clothes safely stored in a bag for evidence collection.
13. Referral from different departments of the hospital for GBV cases and mentally ill patients has also increased, an indication that screening of survivors is done at different entry points is done effectively.

Sustainability

The County Government's partnership with other stakeholders like police and organizations dealing with women's reproductive health, creates a joint team effort and a sense of group responsibility to eliminate SGBV.

Creating awareness via radio has sparked up new discussions on the subject hence ending the existing stigma associated with sexual violation and abuse.

Lessons learnt:

The following were lessons learnt during the implementation of the project:

1. Incorporation of mental health into the GBV program improves quality of services and compliance of survivors to the treatment plans.
2. Involvement of level 1 actors (CHVS) in the GBV activities increases community awareness, community case identification and general GBV services uptake.
3. Creation of awareness through community outreaches and radio talks spread awareness faster on available services for SGBV survivors and mentally ill patients.
4. Training of HCWs on GBV services i.e., first-line support and trauma-focused communication

ensured that many patients opened up and thus increase in survivor/victim identification.

5. Trauma-focused communication increases patient satisfaction as most GBV clients start adhering to follow-up clinics.
6. Linkage with other service providers has enabled a quick flow of services. The police follow up on cases and visit clients admitted to the wards before they get discharged. This ensures several services related to SGBV are performed simultaneously.

Recommendations

- The Centre will offer better outcomes if all services were accommodated under one roof. Survivors still seek laboratory services and pharmacy services outside the centre.
- There is a need for more human resources to facilitate the Centre's operation on 24-hour basis.
- Partnership between state and non-state actors to increase resource mobilization and successful implementation of key projects is paramount.
- There is a need for capacity building of staff from all departments to ensure that SGBV survivors are managed well without further trauma from healthcare workers. It increases their satisfaction and probability of coming back for clinic follow-ups.

4.2 Tana River sets up a Youth Empowerment Centre to equip youth with knowledge and skills for a meaningful contribution to the economy

Introduction (Context and Challenge)

Tana River County has an area coverage of 38,437 km² with a population of 315,743 people, 75 % of which is below the age of 35. A large percentage of its population is either unemployed or under-employed.

Problem statement

Youth unemployment in Tana River County is aggravated by low involvement in business, fisheries and agriculture, low literacy levels and inappropriate skills to utilise the existing opportunities. The County through its County Integrated Development Plan (CIDP) (2018–2022) prioritized the development of a youth empowerment policy/strategy and the establishment of a centre for innovation and youth empowerment to enhance

the capacity of the youth to engage in community development. The County proposed the development of a model vocational training

Centre that will build innovative skills among youth to address food insecurity in the County, support rehabilitation of irrigation schemes, and improve mechanisms for the provision of farming, including the application of inputs, among other interventions to improve livelihoods. However, an understanding of the needs of young people and the skills that should inform this intervention was not done.

The existing Vocational Training Centres (VTCs) in Tana River were not optimally utilized. Many of them run at less than full potential. The problem of inadequate utilization of VTCs and the inability of the VTC graduates to utilize the skills acquired to earn a livelihood was a challenge attributable to the negative attitude of youth in the County towards VTCs and the lack of role models to provide mentorship, among other reasons. It is against this background that the County sought to change the narrative by opting to establish a centre for innovation and youth empowerment.

Implementation of the practice (Solution Path)

The County Government through the initiative of H.E. Governor Dhadho, lobbied for partners to assist in the establishment of the Centre, a priority project in his manifesto. At the inception stage, Governor Dhadho engaged with the Kenya School of Government (KSG), Ministry of ICT, Innovation and Youth Affairs, United Nations Development Programme (UNDP), Kenya Film Classification Board (KFCB), Frontier Counties Development Council (FCDC), Huawei, Horn of Africa Youth Network, and National Youth Council, among others.

A series of sensitization meetings and workshops were conducted to seek acceptance and ownership of the programme, which led to the formation of a County Youth Innovation and Empowerment Steering Committee comprising representatives from youth, persons with disability (PWDs), gender, agriculture, trade, commerce and industry, vocational training and development partners.

Through this committee, 50 youths were trained on the values of the programme and the importance of youth leadership and later made ambassadors to train more youth at ward levels. 32 youths trained on community peace and cohesion were later supported with motorcycles and assigned the responsibility of promoting peace and cohesion in the Tana Delta (the region frequently experiencing community conflicts). The Hola Vocational Training Centre was identified as an ideal site for the establishment of a youth empowerment centre, and on 8th August 2021, a team of 30 selected

youth representatives from 15 wards visited Isiolo Youth Innovation Centre for benchmarking where a lot of information sharing was done which later culminated into partnership linkage.

On 23rd March 2022, the Tana River Centre for Youth Innovation and Empowerment was launched under the leadership of H.E. the Governor, Major Dhadho Godana Gadhae in collaboration with development partners and local stakeholders who declared the Centre officially operational.

The Centre management structure

The Centre is managed by the Board of Governors (BOG) selected through a nomination panel as per Technical and Vocational Education and Training (TVET) guidelines. The nominated board is confirmed by the County Executive Committee Member (CECM) in charge of Education. This board is responsible for strategic decision-making on matters affecting the Centre. The Centre Manager is the CEO of the Centre assisted by a Deputy Manager and a team of staff employed by the County, deployed and assigned roles.

Centre programmes

The current programmes being implemented are:

1. Technical and vocational training programme: This is a TVET programme where youth acquire various technical skills and are awarded recognized certificates after course completion. This programme had been in existence before the establishment of the Centre.
2. Essential computer literacy courses: this programme is offered to youth and any other person willing to acquire computer application skills.
3. Climate-smart agriculture farming: The Centre has a hydroponic farm demonstration Centre where youth farmers learn modern climate-smart agriculture.
4. Entrepreneurship training: youth are trained in entrepreneurship skills and the acquired competence is meant to help them establish businesses.
5. Ajira digital training: youth are trained on how to secure online jobs and link with the world market.
6. Capacity building and training.
7. Hospitality and catering services

In addition, the Centre has plans to expand its programme to include recreation sports and development,

coaching, mentorship and counselling, creative arts and development, and a business incubation unit.

Key partners in implementation and collaborations

| | |
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| United Nations Development Programme (UNDP) | This is one of the key development partners. The partner has supported programmes like funding the Centre in youth training, equipping and supporting the community in peace initiatives. Over 500 youth have benefited from the training support. |
| Kenya School of Government (KSG) | Helped in facilitating training, and lobbying for partnerships and linkages. |
| Miyonga Co. | Training youth in smart agriculture — over 150 youth were trained under their support. |
| Ajira Digital | Content writing, digital marketing and transcription among other skills tailored for the online workplace; trained over 65 youth |
| Huawei | Trained youth on computer application skills. Over 35 youths supported this training. |
| National Youth Council | Participated in training the youth and assisted in the drafting of the County Youth Policy. Over 50 youths were involved. |
| GIZ | Through the Go Blue economy, the organization was able to train 600 youth in go blue skill training to be absorbed in marine-related jobs. |
| Groots and Nature Kenya | Construction and Establishment of hydroponic farm structure |
| Isiolo Youth Innovation Centre | Partnered in sharing the exchange of innovative ideas and experiences. |
| Sports Academy | Assisted in promoting sports programmes in Tana River. |

Resource implication

During the establishment of the Centre, the County Government constructed a multipurpose hall at a cost of KSh2,700,000 and renovated dilapidated buildings at a cost of KSh7,800,000. Landscaping and construction of the Centre gate were done at a cost of KSh3,500,000. Development partners equipped the Centre with furniture, computers and other key ICT equipment at an estimated cost of KSh5,900,000.

The cost of running the Centre had been a major challenge. However, through a little allocation from the County coffers and support from development partners, the Centre can execute its programmes successfully. The Centre generates revenue through levies charged on its conference facilities, catering services and sale of agricultural produce. However, more creativity is required to expand and improve its revenue.

Sustainability

The Tana River Innovation and Youth Empowerment Centre is one of the Governor's key flagship projects. The County's vision is to establish a higher learning and research centre. In this financial year 2022/2023, the County Treasury allocated KSh72 million for upgrading and equipping the Centre. The upgrading programme will continue for the next five years.

The 2018–2022 CIDP captured the Centre as part of its key development programmes. In addition, the County Executive developed the County Youth Inclusion Bill aimed at helping to reinforce youth rights hence improving space for youth engagement. The Bill was presented to the last County Assembly and is yet to be passed. The Centre is required to sustain itself through the creation of income-generating activities. Plans for additional activities to realize this are underway.

Lobbying for partnership support to help the Centre achieve its growth trajectory shall continue and be strengthened.

Result of the Innovation Centre

1. **Empowered youth in leadership skills:** since its establishment, over 700 youths have benefited from leadership skills training and mentorship by key leaders, among them, H.E. Governor Dhadho.
2. **Job opportunities:** within one and half years of the Empowerment Centre's existence, its impact can already be felt — two youths from the Centre secured elective posts, 45 others secured jobs in the Marines through the Go Blue programme, 15 others got County Government jobs, and others established businesses in various fields.
3. **Technical and vocational skills training:** over 270 youths graduated in various certificate courses.
4. **Agribusiness:** 150 youths benefited from smart agriculture training, including hydroponic, mango fruits and aquaculture farming. The farm has acted as a demonstration Centre for various interest groups that visit.
5. **Computer literacy:** through the support of development partners, the Centre trained and awarded computer literacy certificates to over 45 youths free of charge.
6. **Governor's roundtable meetings:** H.E. the Governor has held more than 3 roundtable meetings with groups of youth on mentorship and ideas sharing.

7. **Reduced rate of drug abuse:** Hola Town, in particular Hola Laza, had been a drug den where idle youth were engaged in drug and substance abuse. Since the introduction of the Centre, the number of youths reached and counselled has gone high hence the reduction in drugs and substance abuse.
8. **Development of a youth inclusion policy:** through the support of the National Youth Council, over 50 youths were involved in formulating and developing the Tana River County Youth Policy.
9. **Active participation and inclusivity:** through various trainings, the youth have become well-informed and now actively participate in decision-making forums

Lessons learnt

The establishment of the Centre was a result of a concerted effort by stakeholders through technical and financial support towards putting up the Centre, training the youth on leadership and supporting community peace initiatives. The formation of the youth ambassadors' group to inform and train others, the Governor's initiative to have regular roundtable talks with youths and the involvement of local leaders were key towards the successful establishment of the Centre.

The County Government realized that the cost of establishing and running the Centre was high, therefore a need to establish sustainable partnerships. Lobbying to bring on board development partners was the best option. This was done by writing several proposals and having breakfast and dinner meetings with potential development partners.

The declaration of the Empowerment Centre as a central point for all youth programmes in the County has positively resulted in increased youth activities, including engaging in income-generating activities for sustainable livelihood improvement.

Challenges

Involvement of stakeholders: involvement of stakeholders was one of the most difficult experiences. Radical and divergent stakeholder views could sometimes threaten to derail the process. The cost of maintaining members was often higher than the planned budget, hence stretching the allocation.

Centre revenue: Revenue collection by the Centre was always low and could not sustain its operations, therefore, pushing the management to seek external support.

Recommendations

Partnership: It is important to work with willing partners to deliver different programmes at the Youth Centre.

Localize and customize: The relevance of the youth centre should speak to the unique challenges of each County. As a County, do you have sufficient desegregated data about youth preferences? The design of a youth centre is not a one-size-fits-all but requires continuous adjustment to fit the local context.

Legal foothold: The youth centres should have County ownership at the time of inception, or mechanisms should

be explored to anchor the Centre within the County structure and also get sustained programme funding.

Youth ownership: The process and the running of the Centre should be youth-owned and youth-led for effective youth engagement and buy-in, which is a key factor in the success of programmes, projects or initiatives related to young people and the community as a whole.

Further reading:

Tana River County website <https://www.tanariver.go.ke/>



The entrance to the Centre for Innovation and Youth empowerment



Youths actively participating in an ICT lesson at the Centre for Innovation and Youth Empowerment



The hydroponic demonstration farm unit at the Centre



Youths undertaking a vocational training course in fashion design and garment making



H.E. Governor Dhadho receiving a donation of ICT equipment from UNDP



H.E. Governor Dhadho gracing the graduation ceremony of youths who were trained under the Go Blue programme and ready to join Marine jobs

APPENDIX 1: COUNTY LOGOS



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Murang'a



Isiolo



Kakamega



Vihiga



Machakos



Kilifi



Homa Bay



Tana River

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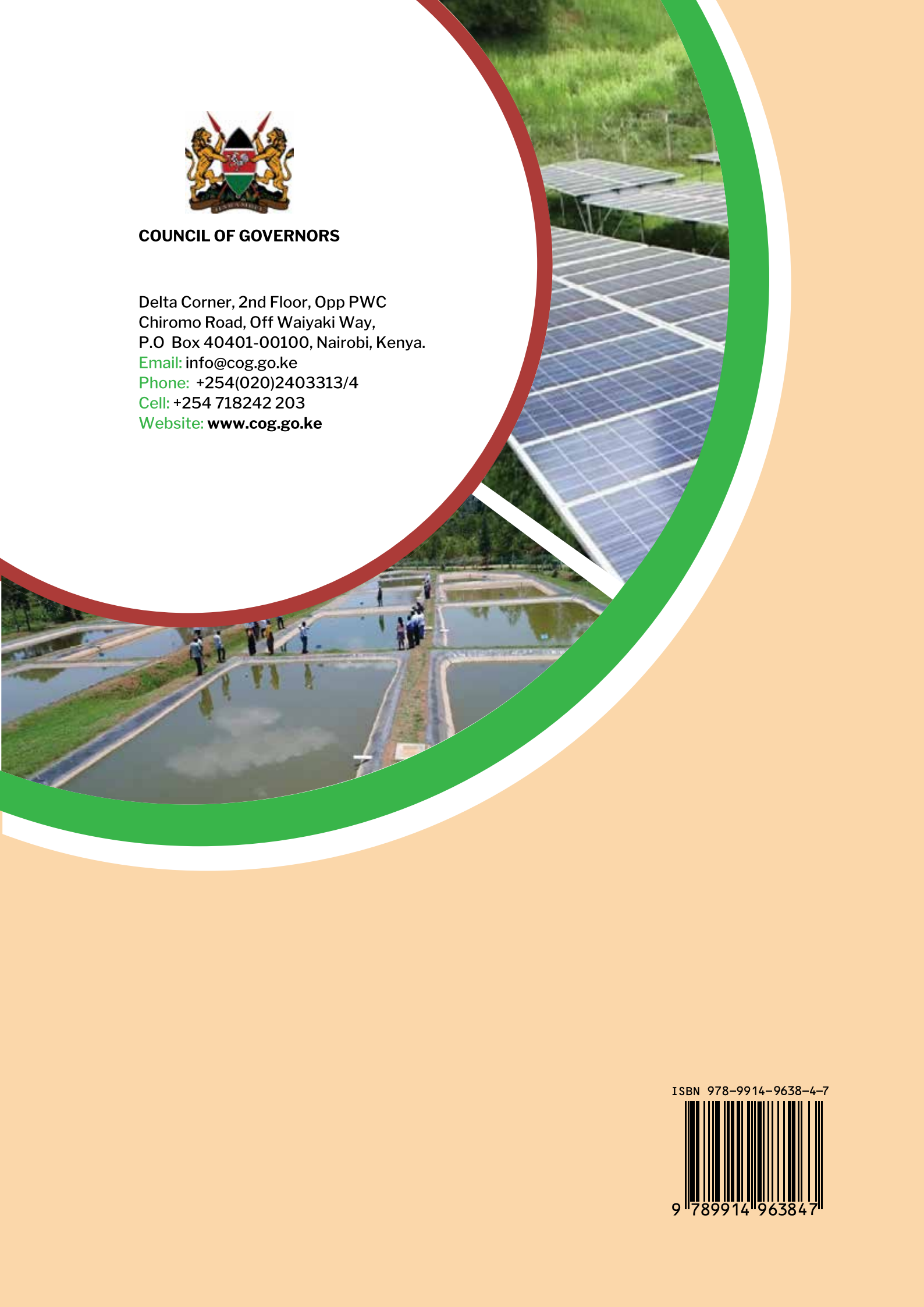
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