#### **End User Subsidies Lab**







#### End User Subsidies Lab – Session 3

#### How the Energy Cash Plus Initiative in Kenya Addresses the Affordability Gap

#### Agenda

- Welcome & Introduction to the End-User Subsidy Lab Patrick Tonui, GOGLA (7 min)
- Energy & Cash Plus Initiative (Mwangaza Mashinani Project) Lawrence Ssentongo, E4I & Wilfred Baya, Kilifi County (30min)
- Company Perspective Christine Waiguru, d.light (8 min)
- Broader Perspectives on Cash in Social Protection Alison Hemberger, Mercy Corps (15 min)
- Q&A (25 min)
- Wrap up Patrick Tonui, GOGLA (5 min)







#### How to Take Part

- Submit your questions via the "Q & A" box, shown on the bottom of your screen
- Feel free to target your question to a particular panelist
- You can also upvote other participants' questions
- Please note that the session will be recorded and shared afterwards
- Experiencing problems? Please notify us via the chat function, shown on the bottom of your screen







#### **End User Subsidies Lab**







#### **The End User Subsidies Lab**

#### **End User Subsidies Lab**



Africa Clean Energy





#### THE END USER SUBSIDY LAB

PURPOSE AND STRUCTURE

Significant progress has been made towards SDG7, but large portions of the population will remain unserved in 2030.

The End User Subsidy Lab seeks to promote the uptake of carefully and well-informed end user subsidies:

- Crowding in knowledge, resources and ٠ expertise from all stakeholders interested in participating
- Offering a platform for exchange, dialogue and ٠ extensive consultation among different stakeholders
- Sharing lessons learned, tools, and ٠ information broadly
- Testing prototype end user subsidy designs ٠

The lab is coordinated by ESMAP, GOGLA, and ACE TAF but welcomes the participation of all stakeholders.

(knowledge, expertise, funding)

into learnings, design prototypes, tools

outputs inform designs and thinking of enduser subsidies





Africa Clean Energy Catalysing Africa's Solar Markets



#### Adding End User Subsidies to The Toolbox

End User Subsidies Lab





END USER SUBSIDIES CANNOT REPLACE ONGOING SUPPORT BUT COMPLEMENTS IT



#### THE IDEA



Africa Clean Energy Catalysing Africa's Solar Markets



#### ACTIVITIES



Africa Clean Energy Catalysing Africa's Solar Markets



Go to knowledge hub (2021)	<ul> <li>Insights from sector specific or adjacent sectors will be collected, curated, and made available via an easily searchable online platform.</li> <li>Resource Hub online: <u>https://www.gogla.org/off-grid-solar-smart-subsidies/reports-and-resources</u></li> <li>Webinar series profiling learnings from end user subsidy pilots or projects: Rwanda, Bangladesh, Kenya (today) and Togo</li> </ul>
Create a Pipeline of 'ready to fund and roll out' country specific designs (2022)	<ul> <li>Support country teams with guidance and expertise in developing and testing end user subsidy designs: the lab will partner with up to three countries.</li> <li>Support development of prototype design, incl. additional research or analytics work required</li> <li>Help to fundraise to implement the pilot</li> <li>Accompany pilot with monitoring &amp; evaluation</li> <li>Inform potential scale-up of a successful pilot</li> </ul>
Enabling Transformative Thought Leadership (Ongoing)	To further stimulate the development of innovative and impactful designs, the lab will act as a thought leader and ideate new frameworks and approaches that can help to reduce the affordability gap and promote inclusive and holistic market development.
	Go to knowledge hub (2021) Create a Pipeline of 'ready to fund and roll out' country specific designs (2022) Enabling Transformative Thought Leadership (Ongoing)

To implement all foreseen activities, more funding is needed -> ESMAP and GOGLA continue to fundraise

#### PLEASE ENGAGE!





The Lab seeks to leverage network effects. If you have interest in the work or would like to contribute to its success, please be in touch with:

- ACE TAF,
- GOGLA,
- or ESMAP/Lighting Global

To stay up to date with our activities and learn more, please visit our website:

https://www.gogla.org/end-user-subsidies-lab

Thank you. Please share comments and feedback! p.tonui@gogla.org

#### Energy & Cash Plus Initiative (Mwangaza Mashinani Project)



Lawrence Ssentongo \_ Senior Programme Manager

Email: Lawrence.Ssentongo@energy4impact.org December 02, 2021



#### Agenda

- 1. MMP Overview
- 2. Project Sustainability Pillars
- 3. Cash Transfer Payment System
- 4. Project Implementation Activities
- 5. Project Key results & lessons learnt from pilot phase into expansion phase
- 6. Challenges



## Project Overview



### Project Overview

Project Name	Energy & Cash Plus Initiative ( <i>Mwangaza Mashinani</i> )			
Project Description	<ul> <li>Leverages upon the existing Social Cash Transfer Programme to provide a conditional cash top up to selected households for the purpose of providing the opportunity for them to access and own a solar lantern or solar home system.</li> <li>The goal is to generate evidence on how improving customer affordability for solar home systems impacts the recipients' sense of ownership and quality of life of children and their families.</li> </ul>			
Purpose	Provide the opportunity for target group to access and own a solar home system in ways that do not distort the market, i.e., the solar products are offered to the vulnerable households as customers on a regular commercial and competitive basis.			
Duration	Pilot Phase : Sept 2018 - May 2020Expansion Phase : Feb 2021- July 2022			
Focal county areas	Kilifi and Garissa			
Key objectives	Develop sustainable energy markets and increase penetration of solutions to the most vulnerable households including those in the lowest income quintile. To Increase children's study hours with aim of improving school performance Technical assistance and skills transfer to county government to enable them implement similar projects in future using public resources and scale up. Improve lighting and opportunities for income generation for the targeted beneficiary households by using sol home system			

The MMP designed to integrate into the Kenya National Safety Net Programme (NSNP) under the CT-OVC, PwSD and OP-CT to support the government's efforts to achieve universal energy access for the most vulnerable segments of the population.



# Project Design

Project Name	Energy & Cash Plus Initiative ( <i>Mwangaza Mashinani</i> )
Design	<ul> <li>Mwanganza Mashinani : "Light for the marginalized areas" launched with the aim of enabling access to off-grid energy to the most vulnerable households. This model presents a conditional cash transfer for the specified population segment : Orphans, disabled individuals, and elderly people who are part of the GOK's National Safety Net Program to receive support under which they can purchase a solar home system.</li> <li>Over 1,600 (Pilot) and 3,500 (Expansion Phase) beneficiaries</li> <li>Solar Suppliers: d.light, Biolite</li> </ul>
Admin	<ul> <li>Managed by E4I; SHS companies monitor repayment remotely &amp; give feedback to E4I for follow ups on subsequent payrolls preparations.</li> <li>Pilot Phase : Cash disbursed to beneficiaries by payment service providers (PSPs) contracted by GoK's Social Assistance Unit (SAU).</li> <li>Expansion Phase: Cash transferred to beneficiaries by MNO (Safaricom) on UNICEF's instructions to individual MPESA accounts.</li> <li>Donor/ E4I reconcile balance of payments 1 month after each payment cycle, and at the end of the project.</li> </ul>



### Stakeholders

Level	Institution
Counties	Garissa, Kilifi
National Government	National Safety Net Program (NSNP), Ministry of Education, Ministry of Energy (MoE), Ministry of Labour and Social Protection's (ML&SP)
Community	Local leaders, Community champions, Beneficiary Welfare Committee, Beneficiary households, Last mile entrepreneurs (solar distributors ).
Key Support Players	Solar Suppliers ( d.light & Biolite) , Payment service Provider _ PSPs ( Equity Bank, KCB )
Project Management	E4I
Consortium Members	Busara Centre (Pilot phase only) & Somali AID - currently Vision Corps Initiative)(Pilot & Expansion phase)
SHS suppliers	d.Light (Pilot & Expansion phase) & Biolite (Pilot phase only)
Implementing Agency	UNICEF
Funding Agencies	Sida











### Theory of Change



## **Beneficiary Selection** Criteria



- a. Enrolled on CT-OVC, OPCT, CT-PWSD Program
- b. An unserved household in an underserved area
- c. Household has children under 16 years (preferably 9-16 years)
- d. Household has at least 1 girl below 14 years
- e. Household size of (4) and above
- f. Any household member with severe disabilities
- g. Any household member with any chronic illness
- h. Is it a woman headed or child-headed household
- i. Is it headed by elderly person (70+ years)
- j. Is the household head willing to pay for SL/SHS (*Commitment fee of KES 250/ USD 2.40 in pilot phase*), expansion phase has no commitment fee



#### Project Governance Structure

**National Steering Committee** Ministries: Ministry of Energy (Chair), Ministry of Labour and Social Protection National Bodies: KEPSA, KEREA Donors: Sida, The World Bank, Power Africa **Project Technical** Working Group **Project Management** - Sida - Energy 4 Impact - UNICEF - Energy 4 Impact **County Technical Country Technical** Working Group Working Group Kilifi Garissa

Beneficiary Welfare Committees/ BWCs (Beneficiary Household representatives) National Steering Committee: Support the national and county governments engage & explore partnerships with other renewable stakeholders such as Power Africa to be actively involved on the Programme. Support advocacy & engagement activities with relevant stakeholders, particularly in the energy sector

TWG : Direct oversight over the workings of the project.

**County TWG :** Oversight over the workings of the project at respective counties . Guiding the implementing consortium

**BWC :** Guide in selection of beneficiaries, follow-up on repayments, aid in BCC activities . 7 in Kilifi & 9 in Garissa



### Project Sustainability Pillars



#### Sustainability Support Pillars



Instrumental in engaging communities, creating awareness, promoting positive behaviour change, ensuring regular repayment and ownership of SHSs.

- Solar suppliers selected will provide warranties & technical support or replacement during the warranty period.
- MMP leverages on the Inua Jamii payment service providers (PSPs).
- Strengthening private sector collaboration is one of the key cornerstones of the MMP and its sustainability.

The high degree of involvement of county governments should guarantee a high degree of ownership from governments



#### Solar Systems

For optimal outcomes, solar devices with at least three lights selected



- Pay-as-you-go enabled (PAYG) to allow payment in instalments & the system can be disabled if payment is not made.
- Lighting Global approved.
- Product warranties and after-sales service within the project locations.



## Cash Payment System



### Cash Transfer Payment System (Pilot Phase)



- The payment made to the beneficiary household on a bi-monthly (every 2 months) basis, referred to as the payment cycle.
- Cash transfer top up was paid to the beneficiary on bi-monthly basis, and it was up to the beneficiary to make the payment to the equipment supplier.
- During the pilot phase, there was no payment to the supplier directly.
   However, there was a cash guarantee by UNICEF in place that covers
   85% of the outstanding value in case of default.



#### Overview of the Payment Workflow (Pilot phase)

#### **Data Collection**

Request data from PSPs	- Prepare payroll for PSPs Payment Implementation		ntation
Request data from solar uppliers Data comparison ( SAU,PSPs & Solar Suppliers	- Share draft payroll with field team, community champions and local government		Recurring Data Reconciliation
Updated enrolment Aasterfile	<ul> <li>Update draft payroll</li> <li>Share draft payroll with</li> <li>UNICEF</li> <li>Prepare and share draft fund request letter</li> <li>Receive comments on draft payroll</li> <li>Update payroll and funds request letter</li> <li>Share final payroll with PSPs</li> </ul>	- PSPs to effect payment - Payment implementation support	<ul> <li>Request data from SAU</li> <li>Request data from PSPs</li> <li>Request data from solar suppliers</li> <li>Data comparison (SAU, PSPs &amp; Solar Suppliers)</li> <li>Updated enrolment Masterfile</li> </ul>
2 uuralua			2



#### Payment Payroll activities: Role Ownership





## Payment Distribution (Pilot Phase)

			PAYG	
		Donor	Instalment	
	Beneficiary	Upfront	6X, every 2	
	Contribution	payment	months	
	\$	( Once )	( Donor)	SHS total Cost
Pilot Phase		\$	\$	\$
	2.4	8.0	20*6= 120	130.4

- All the cash paid to the suppliers passed through the hands of the beneficiary.
- o Beneficiary Contribution of \$2.4 was required
- Upfront payment of \$ 10.4 was required : \$8.0 by Donor and \$ 2.4 by beneficiary.
- 6 instalments of \$ 20 each made by beneficiaries after receiving funds from the Donor.



## Payment Distribution (Expansion Phase)

Expansion Phase	Donor Upfront payment to Supplier \$	Upfront pay to beneficiary. 1 <sup>st</sup> Instalment \$	Monthly Instalment 2X, ( Donor) \$	SHS total Cost \$
	45.21	12.07	46.7*2=93.4	150.7

- Payment design modified to address the Inua Jamii delays. PSPs not included in new design. Funds disbursed through M-pesa beneficiary account directly from UNICEF.
- Upfront payment \$ 45.21 paid directly by Donor to the SHS suppliers.
- Payments done monthly for 3 consecutive months: 1<sup>st</sup> instalment of \$ 12.07; 2<sup>nd</sup> and 3<sup>rd</sup> Instalments of \$ 46.7 each made by beneficiary after receiving funds from Donor.
- o 100% subsidy



## **Project Implementation**



### **Project Implementation Stages**





Market building session



A selection of beneficiaries with the acquired Solar devices



## Data Collection, Analysis and Reporting



- Data collected from 4 primary sources: the beneficiaries (and a control group from within the community), the suppliers, the micro-entrepreneurs and the bank.
- Continuous qualitative data collection.
- Beneficiary complaints and grievances' feedback mechanisms to the national complaints and grievances (C&G) system.



## Project Key Results



Objectives	Indicators	Target	Achievement
To ensure that that the beneficiary households selected have accessed an off-grid solar home system.	Number of beneficiaries using a SHS	1,500	1669
To provide the beneficiaries with skills to engage in livelihood activities & knowledge how to manage their SHS.	Number of beneficiaries trained in livelihood activities & SHS maintenance skills.	1,500	1669 – all solar device owners were engaged



#### Key lessons from pilot phase for expansion phase

Phase 1 Key lesson	S
Improvement in the way of life.	<ul> <li>Through the surveys conducted during the programme implementation, confirmed improvements in school performance of children because of the installed devices. Because of the devices, the school going children were able to have additional study hours in the evening and early morning hence improvement in school performance.</li> <li>Creation of small income for households through charging neighbours' phones, increased safety of the house surroundings , &amp; families were able to access the news through the radio.</li> <li>A positive spill over effect to the entire community was seen as demand for solar energy and potential business opportunities noticed</li> </ul>
Stakeholders' programme coordination	<ul> <li>70% of beneficiaries completed payments.</li> <li>30% shortfall was due; -death of some beneficiaries, delayed payments made some beneficiaries lose morale in the programme, case of Garissa County some nomadic nature of beneficiaries led to drop out since went in far places not covered by network.</li> </ul>
Deceased beneficiaries / Defaults	<ul> <li>To mitigate payment risk to the solar suppliers, the MMP set up a cash guarantee that covered 85% of the outstanding value in case of default. Solar suppliers indicated that this was decisive factor for them to be able to accommodate flexible payments and other changes to their typically standard PAYGO model. Adopted in the expansion phase.</li> </ul>



# Project Challenges



# Challenges ( a )

#### Governance

Category	Challenge	Measure
Lack of national ownership of programme	<ul> <li>The MM project set up envisaged that the National Project Steering Committee was to be chaired by the Ministry of Energy to provide oversight and advice and County TWGs for the project implementing organization. However, there were delays in resolving the Chairmanship agenda and the ministry failed to hold the meetings as anticipated. In terms of coordination, county level coordination was more efficient than at the national level.</li> <li>Most national stakeholders indicated that they were kept informed, but were not closely involved, during the design and implementation of the project. At the county level, TWGs were always well attended and active creating good political buy-in and commitment from county-level stakeholders</li> </ul>	UNICEF planned to engage the national level stakeholders in the expansion phase


## Challenges (b)

#### Take up of repayment mechanism

Category	Challenge	Measure		
Payment delays due to payment mechanism	<ul> <li>The project design called for the top up payments to households to be paid on a bi-monthly basis, at the same time as the regular Inua Jamii cash transfer payments, and for the households to use these to make the PAYG payments to the suppliers. As a result, unpredictable delays in the Inua Jamii payment process led to delays in the PAYG payments.</li> <li>The implementing consortium did not have a protocol in place for managing these delays</li> </ul>	<ul> <li>Payment design for expansion phase is not linked to Inua Jamii. Payments are monthly and funds sent to M-Pesa accounts</li> </ul>		
Beneficiaries faced challenges in terms of taking up the mode of repayment	<ul> <li>Issues with the mobile phone (e.g., not having a mobile phone in the household/kept by the beneficiary, changing mobile phone number)</li> <li>Not understanding the how to top up or the amount to top up</li> <li>Not understanding how to use M-Pesa or enter the USSD code into the device due to low literacy levels.</li> </ul>	<ul> <li>Expansion Phase : Beneficiary must own a phone instead of relying on the caregiver</li> <li>SHS top-up skills sensitizations campaigns undertaken during enrolment stage</li> </ul>		



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## Challenges(c)

#### **Financial Sustainability**

Category	Challenge	Measure
Financial Sustainability	<ul> <li>During the pilot phase evaluation solar suppliers reported that very few households made the repayments during the time of the Inua Jamii payment delays.</li> <li>The SHSs offered through the project are expensive products for the target market and the top-up provided by UNICEF is more than 70% of the value of the regular Inua Jamii transfers.</li> <li>The solar products require maintenance and it's likely that the lithium batteries will need replacement after a few years' use. This maintenance would need to be paid for by households themselves and can be costly (approx.\$20).</li> </ul>	<ul> <li>Expansion phase , the payment design not linked to the inu Jamii payments. No delays expected.</li> <li>User education interventions undertaken in expansion phase to ensure beneficiaries are aware that the battery will require replacement after some time. Monitoring over long term required to assess if beneficiaries repaired their dead systems when they develop problems</li> </ul>

Without the project, affordability appears to remain a constraint.



## Challenges ( d )

#### Communication

Category	Challenge	Measure
Multiple communication layer approach	<ul> <li>Pilot phase worked through multiple channels to communicate with beneficiaries. Initial awareness raising done by E4I and later with the solar suppliers in public gatherings facilitated by chiefs and local leaders (including BWCs).</li> <li>Used interactive voice response (IVR) calls and text messages to communicate with households about repayment; also distributed brochures and FAQ</li> <li>In pilot phase, Beneficiary Welfare Committees (BWCs) and Community Champions (CCs) were also engaged to explain the repayment mechanism to households.</li> </ul>	<ul> <li>BCC Strategy revised. IVR calls&amp; text messages dropped since didn't not prove effective in pilot phase.</li> <li>With the use of the BCC Expert , Chiefs, BWC members &amp; Community champions underwent several trainings tasked with communications.</li> </ul>



## Challenges (e)

#### Operations

Category	Challenge	Measure	
Enrolment	<ul> <li>Although the MM pilot phase enrolment process proved effective, there was a dropout rate of about 25% of the total enrolled beneficiaries and those that took up the solar devices.</li> <li>This was attributed to several reasons, among others, nomadic lifestyles of Somali people in Garissa that travelled across the border to Somalia and were prevented by bad weather conditions to return.</li> </ul>	<ul> <li>Expansion phase: County Govt fully guided the Implementing team on the enrolment &amp; Control groups left out in pilot phase were all selected.</li> </ul>	
Distribution	<ul> <li>Despite the systems being plug and play, the MM pilot phase established a need for more hands-on support in the system installation process. It was found that a few beneficiaries took the systems home but did not open them or install them.</li> </ul>	<ul> <li>SHS supplier &amp; Community champions to follow-up and help with installations</li> </ul>	



## Challenges (f)

MIS

Category	Challenge	Measure
Data management & reconciliation	<ul> <li>Data used in the implementing consortium's MIS is collated from different sources including paper-based enrolment records and excel spreadsheets from other sources (e.g., solar suppliers). This makes reporting time consuming.</li> </ul>	<ul> <li>For Expansion phase : PSPs not involved in the process. Funds sent by UNICEF to the M-pesa beneficiary accounts.</li> <li>Data only collected from solar suppliers which makes process fast</li> </ul>
Reporting	<ul> <li>Households enrolled in the MMP are not reflected in the Single Registry because the complementary module is not in place.</li> </ul>	<ul> <li>Enrolment data, payment information and grievances should be fed into the Single Registry using the complementary module.</li> </ul>









A Global Leader in Solar Power for Off-Grid Families

## Who is d.light/why the initiative.

d.light is a global leader in solar-powered solutions for people without access to reliable electricity.

We are also the largest distributed solar lighting brand for households and small businesses in off-grid communities.

We envision a future where all people are empowered to enjoy the freedom and improved quality of life that comes with access to reliable, affordable off-grid light and power.

We aim to increase solar energy savings and protect against rising utility costs. Our social impact strategy is measured across four areas of wellbeing. Financial Freedom, Productivity freedom, Productivity gains and environmental health. Our current social impact plan to reach 1B lives by 2030and currently we are at 125M lives.



#### D150 Target Customers

- Lead simple lives and have an unsteady source of income
- Current lighting solutions solar lanterns, small SHS, small Koroboi, phone torch, ordinary torch, candles.
- Key Insight: Life can generally be a struggle for them, though they work hard to survive.



Show & Tell – Have the physical product with you and show them what they can have

How do we pitch to them?

- Hype up the added value You get not only lights, but a radio & torch, to support your hustle
- **Talk up affordability** Daily rate of 45/- is like what you would spend on airtime, but D-series will benefit your entire family

#### **Triggers to purchase**

- Need they don't have houses with many rooms, so 3 lights is enough
- Affordability they don't have much to spare
- Availability they need a ready accessible solution

#### **Barriers to purchase**

Aspirations – want a system which can upgrade to a TV

## Why the initiative.

#### Quality of Education

Poor performance in schools due to lack of lighting to allow extended study hours both at homes and schools.

#### **Productivity Gain**

Less working hours for men & women doing small business due to nightfall in areas which are off grid leading to reduction in yield productivity

#### Good Health and wellbeing

Poor quality and unhealthy alternatives – kerosine,firewood,diesel and candles have paused health risks and environmental problems. Improve on wellbeing of most families through adoption of clean energy

## **Opportunities/Barriers**

#### **OPPORTUNITIES**

1.MMP has given dlight an opportunity to scale up its impact goal of 1B lives by 2030

2.The program has facilitated the penetration of very remote areas that we d.light could not due to infrastructure challenges

3.Learnings from the project have informed improved after sales service through training of local technicians hence becoming the solar preferred brand..

4. The program has as well increased product awareness and affinity in virgin/unpopular markets.

5. The program has increased employment opportunities in the 2 markets for locals hired to take care of aftersales and expanding said markets.

#### CHALLENGES.

1. SECURITY challenges especially Garissa area with terrorist activities posed as a risk during enrollment & deployment

2.Penetration barriers-poor road network hindering accessibility

3.illiteracy and language barriers- hinders proper usage of the product

4. Delayed payment cycles- affected payment rate plans in the paygo system

5.Improper Installation- some devices were wrongly installed leading to reduced efficiency.

6. Communication barriers-& lack of cellular phones- made token system difficult to execute.

#### RESULTS

- 1.Increased sales and revenue
- 2. improved brand and product awareness/affinity
- 3.Exposed dlight to other initiatives eg, Kosap project, pamiga funding e.t.c

# Thank you

### **DEPARTMENT OF ENERGY PRESENTATION**

# **KILIFI COUNTY GOVERNMENT AND ENERGY FOR IMPACT COLLABORATION PROGRAMME Presented By** Wilfred K.Baya **Principal Energy Officer**



#### Vision

- "Efficient Land management, affordable quality housing and sustainable urban development and efficient utilization of energy resources"
- Mission
- "To provide an enabling environment for a sustainable land use and urban management, development of housing and clean energy for all."



# INTRODUCTION

- The Constitution 2010 provided for a two tier structure of government, namely: the National and County Governments.
- In relation to the County Governments, Part 2 of the Fourth Schedule of the Constitution provides that County Governments shall be responsible for;
- County Energy Planning
- County Energy Regulations & Licensing and
- County Energy Development including Electricity and Gas reticulation.



# INTRODUCTION

#### Cont.....

- The County Government Act, 2012, an ACT of Parliament gave effect to Chapter Eleven of the Constitution; to provide for county government powers, functions and responsibilities to deliver services and for connected purposes.
- Part II of the Energy Bill 2018 further consolidates the functions of national and county governments.
- Pursuant to Article 186(2) of the Constitution, energy planning , energy regulation & licensing incorporating petroleum, coal, renewable energy and electricity is a concurrent role of both the National and County Governments but at their respective jurisdictional levels.



# COUNTY ENERGY PLANNING

- County energy policy.
- Development of Kilifi County Energy Audit Report
- County energy action plan/Master plan.
- County GIS database.
- Feasibility study on waste to energy.
- Feasibility study on biogas adoption technology in Kaloleni,
   Ganze and K.North
- Context energy analysis on clean cooking technologies.



# COUNTY ENERGY DEVELOPMENT

#### The county has installed ;

> Over 3000 Solar lanterns to orphans and vulnerable children

- > Over 70 solar high mast and
- > Over 50 electrical Flood lights
- > Over 200 electrical street lights and has installed over
- > Over 130 streetlights



#### COUNTY ENERGY REGULATION & GAS RETICULATION

#### The County has Developed the following documents;

- County Regulation Manual
- County Energy Bill which awaits tabling to the cabinet, approval by the approval County Assembly and finally taken to Governor for assent.



# COUNTY OPPORTUNITIES

- Existence of a well established Energy Directorate
- Availability of undeveloped energy resources
- Development of County Energy Policy
- Availability of private land for investments
- Energy act 2019 has given powers to counties to undertake energy planning ,regulation and development
- Existence of the energy committee from the county assembly
- A Good working relation between the county, other government agencies and the private sector
- The draft Kilifi County Energy plan-Highlighted all the energy resources mapped across all sub counties ie Wind, Solar & , biomass
- GIS Energy Data Base



# **DONOR FUNDED PROJECTS**

- > The county has also worked closely with donor funded projects to ensure there is maximum access of electricity and modern forms of energy in the county.
- KOSAP-3 Minigrids,24 SHS,32 Solar Pumps for Boreholes(World Bank)
- Project Jua-70 Stand Alone SHS(European Union)
- Mwangaza Mashinani-1152 SHS(UNICEF)
- We Share-12 Stand Alone SHS for Primary School(Italian Company)
- Groots Kenya-Clean Cooking Context Analysis(Groots Kenya)
- KEMP-1 Minigrid(World Bank)



# MWANGAZA MASHINANI PROJECT

- **Period:** June 2018 to May 2020
- **Target**: 750 HH reached 1162 HH
- Sub counties covered: Ganze (4 locations) and Magarini (3 locations) = 7 locations covered.
- Control group: Kaloleni sub county (2 locations)
- Solar suppliers: 3 but reduced 2 (D.Light and Biolite).
- Total units deployed: 1162
- **Repayment rate**: above 70%



#### EXPANSION PHASE

- Period: February 2021 to July 2022
- Overall target: 3,500 (Kilifi 1,750HH)
- Sub counties / locations: Ganze (4 +1); Magarini (3 + 2);
   Kaloleni (2).



#### SUCCESS STORIES IN KILIFI COUNTY PROJECT IMPLEMENTATION

- TWG Composition & Participation
- Good Community Engagement
- Active solar suppliers
- Chiefs; BWCs& Community Champions
- Supportive PSPs; KCB & Equity
- Community response



## **BENEFITS OF THE PROJECT**

- Increased access to electricity
- Improves education.
- Entertainment.
- Health.
- Comfort/Reduced Hustle
- □ Security.
- Productivity.



## CHALLENGES ENCOUNTERED DURING IMPLEMENTATION

- Dropouts
- Language Barrier
- Lack of Technical Knowhow
- Delayed payment cycles
- Faulty devices / accessories
- Installation of devices
- Covid 19
- Defaults on solar Instalments 30 %



## CHALLENGES CONT.....

- Illiteracy is a key barrier to solar use.
- Low phone access and poor network connectivity.
- Delayed disbursements that affected the payment of the SHS/SL.
- After sale hitches set up, token reactivation and maintenance.



## AREAS OF CONCERN AND IMPROVEMENT IN THE SECOND PHASE

- Beneficiary targeting full understanding of the beneficiaries and their ecosystem, including potential limitations to conversion and sustained use of the SHS/SL.
- Consumer awareness and education deployment of effective channels and messages at the right touch points (with the inclusion of champions and sustained mobilization from the pilot phase as critical diffusion drivers).
- Support capacity expanding the base for support on product use and maintenance.
- Easing of post purchase processes to avoid delays or drop offs payment, technical support and grievance channels.
- Alignment and connectedness at all stakeholder levels (implementers and support system) including regular reporting at the different levels.



#### WAY FORWARD

#### Need to ;

- To Change the payment structure to the beneficiaries and Solar Service Providers
- To provide strategic direction and oversight to the initiative to ensure that it meets its aims and objectives in Kilifi County.
- To ensure that the Energy and Cash Plus Initiative identifies the right beneficiaries and meets the needs of the target beneficiaries.
- To ensure that the Energy and Cash Plus Initiative builds and adds value to existing national and local social protection policies for children and other initiatives to improve social protection policies and systems.
- To ensure that Energy and Cash Plus Initiative is consistent with and informs the implementation and the implementation teams for effective delivery on the goal of the project.
- To ensure the dissemination of information and update to the wider stakeholder groups.





# THANK YOU





# Reflections

#### Zooming out on Sustainability Broader Perspectives on Cash in Social Protection

Alison Hemberger Director – Markets and Cash



**Reflections from Market Facilitation** 

# Zoom Out: Getting to "Sustainability"

#### Current

#### Future

Functions	Players		How dovelop this	Eurotiono	Players		
	Who does?	Who pays?	vision?		Functions	Who does?	Who pays?
	CORE				CORE		
			Valid	Valid Ambitious			
RULES			RULES				
				2			
SUPPORTING FUNCTIONS					SUPPORTING FUNCTIONS		
			Realistic	Positive			
			What facto to take ii developin fi	ors do we need nto account in g a view of the uture?			



# Zoom Out: Getting to "Sustainability"

	Current (INVEST)		Future (post-INVEST)	
		Who pays for		
INVEST Activity/ Functions	Who does this activity?	this activity?	Who does in 5 years?	Who pays in 5 years?
School building/ retrofitting	MoLSAMD, <del>MC</del>	Donor	Gov't (MoLSAMD), shura Gov't (MoLSAMD and MoE),	Govt (MOLSAMD), shura Gov't (MOLSAMD and MoE),
VTC mangement	Shura, gov't, <del>MC</del>	<del>Donor</del>	shura	shura
Developed and revise curricula	PS. <del>MC</del>	<del>Donor</del>	PS, MoLSAMD, MoE	Gov't (MoLSAMD, MoE)
Technical training	PS	Student,	PS	Student,
Social skills training	PS	Student, <del>Donor</del>	PS	Shura, MoLSAMD, MoE
Mentoring of students Development/distribution training	PS, shura, gov't	Student, <del>Donor</del>	??	??
kits	<del>MC</del>	<del>Donor</del>	??	??
Market research	PS, shura, <del>MC</del>	<del>Donor</del> , shura, PS	PS, shura	??
Monitoring of students	₩C . shura. gov't. communitv	<del>Donor</del>	Shura, gov't, community	Gov't
Teacher training	<del>MC</del>	<del>Donor</del>	Gov't (MoE, MoLSAMD)	Gov't (MoE, MOLSMD)
Business linkages	PS, <del>MC</del> , govt	-	??	??
Student selection	PS, <del>MC</del> , shura, gov't, student	-	PS, shura, gov't, students	??
Student transportation (home-VTC)	Students	Students	Student	??
Teacher transportation (home - VTC)	Teachers	Teachers	Teacher	??
Gender training/awareness trainings	<del>MC</del>	Donor	??	??
Capacity building (gov't)	<del>MC</del>	Donor	??	??



#### **Reflections from Cash Programming**

# **Categories of Social Protection Systems**

CATEGORY OF MATURITY		DESCRIPTION	
1	NON-EXISTENT	No state interest in developing long-term social protection, and only ad-hoc foreign aid / humanitarian interventions.	
2	INTERNATIONALLY-LED	No clear progress in state policy, but emerging foreign aid interventions shaping up towards a system with some elements of harmonisation or coordination.	
3	STATE-LED INTEREST	Some state interest to expand social protection (to the most vulnerable), with some elements shaping up, e.g., scaled-up aid-supported interventions or an outline of what could become a national flagship programme.	
4	STATE-LED COMMITMENT	Commitment to expand social protection (as articulated in e.g., national strategy), with some flagship initiatives for the poor (co-)funded by the state.	
5	STATE-LED EXPANDING	Clear state policies / laws and a growing set of social protection schemes.	
6	STATE-LED MATURE	Well established system with high coverage of populations and needs.	
Sourc	Source: Oxford Policy Management (2015)		


#### **Reflections from Cash Programming**

# **Social Safety Net Integration: Success Factors**

INTEGRATION SCALE DONOR Including the formation of a Through continuing consortium and a financial and programmatic SUPPORT support, and improved well-functioning Cash quality of funding Working Group HARMONIZED CONVENING PROGRMMING POWER

> Through robust targeting, and harmonization of all programme design across all partners in the collaboration

Via an intermediary like the World Bank, which bridged many of the perceived divides



#### **Reflections from Cash Programming**

## **Key Lessons from Iraq Experience**

- Long timelines!
- Trust building and information sharing are critical
- Quality of funding matters
- Government support is essential and can change
- ) Data protection standards and regulations differ
- ) Scale is a must







#### ALISON HEMBERGER

Director – Markets and Cash

## **Q&A time!**

- Write your questions in the Q&A box
- Mention if it is for one of our speakers in particular







### Thank you for attending! Want to learn more?

From reports detailing why end user

smart design, find the latest tools and

resources.

subsidies are needed to papers profiling



Off-grid solar solutions provide the cheapest and fastest way to electrify hundreds of millions of homes and businesses — and yet over 100 million people will still be unable to afford them in 2030. It is increasingly clear that we need to bridge this 'affordability gap', and end-user subsidies, which diractly reduce costs for consumers, will play a key role. However, to avoid market distortion – which can hamper other energy access efforts – such subsidies must be designed carefully. To enable stakeholders to jointly design smart and effective end user subsidies, GOCLA, ESMAP/Lighting Global and Africa Clean Energy (ACE), have created the End User Subsidies Lab: pooling knowledge, technical expertise, and funding. We welcome all stakeholders to contribute to the Lab with resources available to them, be it knowledge, expertise, or financial contributions.



About the End User Subsidies Lab

What is an end user subsidy? Reports and Resources

Get an overview of the Lab and its two main workstreams to catalyse smart, holistic end user subsidies. Compare to supply-side subsidies, and more.



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Find recordings from recent events and webinars on smart subsidies and bridging the affordability gap. Listen to the sessions.



End user subsidies for off-grid solar are already operating in several countries. Coming soon: Details of their design and implementation.

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