

Solar Water Pump Consumer Awareness Raising Campaign Readout

Machakos, Kenya

September-December 2021



Acknowledgements

The SWP awareness-raising campaign aligned with existing priorities from the [Low Energy Inclusive Appliances programme](#) (LEIA) of carrying out a market-specific intervention and expanding our EforA audience engagement to include consumers – unlocking a new dimension of practice in the sector, as no other entity is focusing on deep-dive in-market awareness-raising.

Campaign partners

The campaign was supported by the IKEA Foundation with in-kind support from USAID Water and Energy for Food Grand Challenge. The campaign also enlisted participation from Global LEAP affiliated product manufacturers.



IKEA Foundation



Authors

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Background & Context



Campaign Rationale & Relevance

Campaign Rationale & Relevance

Situated at the heart of the water-food-energy nexus, the solar water pump plays a critical role in improving the incomes and resilience of rural households.

A 2020 survey of energy access practitioners ranked solar/electric water pumps first in perceived development impact for both household and businesses/productive use applications. Some of the social and economic benefits for smallholder farmers include:



Potentially increasing farm yields by up to 3x



Building communities' resilience to droughts and the negative impacts of climate change



Increasing household income and food security from the sale of higher farm yields

However, despite these benefits, the the market for solar water pumps is vastly underpenetrated. For example, in sub-Saharan Africa where 95% of farmland is rainfed and reliant on unpredictable weather patterns, there is still low adoption of solar pumping technology. Furthermore, the majority of farmers who irrigate their land use buckets or diesel/fuel-powered water pumping.

Campaign Rationale & Relevance



Credit: Aggrico

Low demand for SWPs has been linked to:

- Low end-user awareness of the technology's' benefits
- Little/no knowledge of financing options (many perceive the technology as unaffordable)
- Limited understanding of how ownership can positively affect agricultural yields/incomes

The aim of the in-person awareness-raising campaign was to stimulate consumer awareness and potentially increase demand for a productive use technology in a mature enough market where increased demand could be met with supply, and environmental conditions were conducive to its use.

In consideration of the technology and market maturity most suitable for the project, solar water pumps (SWPs) & Machakos County, Kenya were chosen as a highly viable campaign ground.



Campaign Goals

Campaign Goals

The objective of the project was to design, test and implement an awareness raising and behavior change campaign that would boost the uptake and use of off-grid solar water pumps.

Below- and above-the-line campaign activities aimed to:

- **Create program awareness** through collaboration with partner organisations, to engage consumers and demonstrate how the SWPs works, create awareness of locally available products through the campaign, link target audience to access the products, and create awareness on the available financing options.
- **Grow consumer demand for high-quality solar water pumps** and emphasize benefits such as reliable after-sales support and consumer protection through product warranties.
- **Build retailer demand for solar water pumps** through increased consumer demand.
- **Encourage sustainable practices:** Share information and promote sustainability broadly and include messaging around water usage concerns (e.g., using drip irrigation or considering implications of over extraction on water table if using boreholes).
- **Emphasize inclusivity:** Below-the-line campaign activities should include sensitization among men and tribal/community leaders about the role of and benefits to women regarding access to off-grid appliances, as well as direct outreach to women regarding the benefits of owning and/or having access to a solar water pump.

The desired outcome was to reach at least 5% of the total addressable market through the activities described above. Machakos County has a total population of 1,421,932 with approximately 402,466 households.



Selecting a Target Geography & Technology

Selecting a Target Geography

In selecting a focus technology and geography for this campaign, we relied on market scoping research paired with internal and external consultations. The goal of the research was to identify specific markets and technologies that are most ripe for action, and where additional efforts would yield results in terms of scale and other indicators of market health.

Country selection was based on the following criteria:

- **Presence of a critical mass of potential customers** with high enough incomes or enough ability to access financing to justify the investment in public awareness
- **Availability of supported technologies in-market** for convenient distribution to consumers.
- **Presence of capable companies able to manage increased supply** and/or solutions to assist consumer financing and capacity as well as company financing and capacity
- **Existing local capacity and infrastructure**, including extent to which end-users can access finance to make purchases or access technical assistance for new technology adoption.
- **Presence of IKEA Foundation/EforA implementing partners**
- **Presence and reach of Secretariat field teams**
- **Presence and availability of trusted consultant(s)** as well as local ecosystem requirements

Selecting a Target Geography, ctd.



In comparison to India and Tanzania, the other markets we considered, Kenya stood out as the target geography for reasons including:

- **It is a more mature solar appliance market** – there is a demand for high-performing solar appliances and the country’s enabling environment supports the uptake of these products
- **Existing synergies with the Global LEAP Results-Based Financing program** – this presented an opportunity to potentially drive sales and track them effectively, informing future M&E activities
- **Presence of several existing implementing partners** who could be useful beneficial for the project
- **Presence of vetted companies** who could meet an increased demand
- **The PAYG landscape in Kenya is the most mature in East Africa** - lending a good reference on the impact of availing financing options for improved product uptake

Selecting a Target Technology

The technology selection was based on:

- **Presence and affordability of product(s) in given market(s)**
- **Relevance for productive use and gender/inclusivity criteria**
- **Potential household impact value**
- **Consumer purchasing behavior, interest and need**
- **Feedback from stakeholder consultations in the scoping phase**

Among the technologies considered, which included refrigerators and solar mills, solar water pumps were chosen because of:

- Existing synergies with the Global LEAP Results-Based Financing program, which (at the originally planned time frame) was running for SWPs.
- The potential of SWP to unlock livelihood and sustainable development benefits for smallholder farmers, as well as its direct effect on farming practices (compared to refrigeration which is not directly an agricultural appliance).
- The relative maturity of the technology.



Selecting an Implementing Partner

Selecting an Implementing Partner

A competitive bidding and due diligence process was employed to invite Expressions of Interest from any eligible implementing partners across the countries of consideration. Upon further narrowing down to SWPs and Kenya, a Request for Proposals was issued with more detailed criteria, including:

- **Technical Approach** – interested partners were expected to demonstrate an understanding of the overall project context and deliver a detailed work plan that aligned with the campaign objectives
- **Management Structure and Staff Qualification** – partners were expected to possess the professional qualifications and requisite expertise and experience to carry out campaign activities through to the project completion
- **Past Performance and Corporate Experience** - partners were evaluated against their past performance, familiarity, and experience with consumer awareness raising campaigns; local expertise including experience, qualifications, and track record in implementation of similar initiatives
- **Proposed Cost** – the cost evaluation was based on feasibility, completeness, and practicality of the contract award while maintaining a competitive range

While eligible partners who responded to the EoI were expressly invited to submit a proposal, the RFP was open to any additional partners who may wish to participate in the process.

Five proposals were received for consideration by an internal committee who scored the partners' applications against the criteria established by CLASP. Based on the judges' scores, and a final discussion among the committee to vet the results, Exp Media were selected as the implementing partner for this project.

Exp Social Marketing - Implementing Partner



[Exp Social Marketing](#) is a Pan-African Social and Behavior Change Communication/Social Marketing specialist.

The agency is a division of Africa's largest and leading experiential agency network- [Exp Group](#), that has been operating across the African continent for more than 37-years, building a network of 11 wholly owned agencies in 8 countries (and a further 7 partner agencies in 7 other countries).

The organisation delivers thought leadership and results driven solutions for behaviour change in a target audience.



COVID-19 Impact on Project Implementation

COVID-19 Impact on Project Implementation

The COVID-19 pandemic was an unforeseen constraint in delivering the awareness-campaign. Specifically, the pandemic impacted:

- **Project timelines** – The campaign was initially scheduled for launch in December 2019, however, this was delayed to a launch date in September 2021.
- **In-person engagements with the community** – Part of the campaign activities involved in-person activities such as household visits and hosting community forums. The in-country travel restrictions were an obstacle to carrying out these activities and caused delays. Furthermore, when the activities eventually took place it was important to exercise social-distancing at gatherings and wearing of masks to uphold the safety of those participating.
- **Financial implications** – Because of the delay in greenlighting the project, the budget originally assigned to the campaign was reallocated elsewhere in the LEIA programme, including providing COVID-19 relief to companies. This meant that when the restrictions eased and the project was reconsidered for implementation, its budget was about 50% of original expectations, and the scope was therefore reduced to a single county in Kenya, as opposed to multiple counties as planned.
- **Staffing** – Due to the lapse in time, the staff originally assigned to the project at Exp Media had changed, and there were additional delays in starting / revisiting the scope and details of the campaign with a new project manager and fewer staff assigned to the campaign.



Campaign Timeline

Timeline of Campaign Activities

Campaign Timeline			
September 2021	October 2021	November 2021	December 2021-January 2022
<ul style="list-style-type: none"> • Community forums • One-on-one household visits • Recruitment of farmer community influencers, traders, partners and stakeholders • Farmer workshops for training community influencers • Mapping work planning and logistic (County and sub-County licences) • Conducting baseline study 	<ul style="list-style-type: none"> • Community forums • One-on-one household visits • Radio ads on local stations • Product demo by SWP manufacturers 	<ul style="list-style-type: none"> • Community forums • One-on-one household visits • Radio ads on local stations • Product demo by SWP manufacturers 	<ul style="list-style-type: none"> • Community forums • One-on-one household visits • Radio ads on local stations • Expert radio interview featuring CLASP team member • Filming WE4F & CLASP Shamba Shape Up episode • 2 field visits by the CLASP team • Conducting end line study

Additional campaign dates:

2019-2020: Project planning and development

June 2022: Shamba Shape Up episodes airing

Text colour code

Black - activities conducted over several months

Blue - activities that were specific to a single month



Methodology



Development of Strategic Engagement & Communication Strategy

Campaign Strategy

- The project design focused on awareness-raising through information sharing to grow demand for solar water pumps and strengthen the supply side by engaging key players and traders to link access through distribution channels to Machakos County.
- In addition to the findings from the baseline survey, Exp conducted a desk review to inform the strategic plan and ensure a human-centred campaign design. The strategy placed the target audience's realities and challenges alongside the objectives of the campaign intervention. Hence building relevance and value for the target audience that we wanted to adopt SWP usage. This process included drafting relevant messages and materials and subjecting them to the audience for fit testing and feedback.



Image: A farmer participates in a one-on-one interview with a campaign facilitator

Campaign Strategy

- The adopted communication strategy included both mass and interpersonal channels to create general awareness and personalized communication to address any barriers to SWP adoption. Specifically, radio, household visits, posters and wall branding were the most prominently used channels to reach the target audience.
- The campaign strategy also included a catchy tagline in Kiswahili 'Kilimo bora, mapato bora na solar water pump' which translates to 'Great farming, great returns with solar water pumps' that piqued the interest of the community members.



Image: Campaign communication collateral

A decorative graphic consisting of a thin horizontal grey line across the middle of the page. Two thick diagonal lines, one yellow and one orange, meet at a point on the right side of the page, forming a large triangle that points to the right. The yellow line is above the horizontal line, and the orange line is below it.

M&E Activities

M&E Activities

The campaign strategy aimed to deliver insights from consumer focus group interviews and stakeholder mapping exercises as part of market assessment activities. An M&E framework was developed to include tools such as consumer and stakeholder surveys as well as appropriate KPIs, a theory of change and evaluation questions to support a well-planned roll-out and assessment based on findings from the baseline survey, partner feedback, and in-county scoping research.

M&E objectives for this campaign included:

- **Relevance:** we wanted to better understand the appropriateness of SWP for SHFs, and learn about the relevance of the campaign in supporting technology take up in Machakos
- **Efficiency:** We wanted to learn about running a campaign like this in practice and whether it is an effective use of resources in the context of increasing take up of SHFs
- **Effectiveness:** We wanted to understand the reach of the campaign (with a 5% TAM target), and understand changes in SWP awareness, shifts in relevant attitudes and beliefs about SHFs, as well as understand uptake in Machakos county

To assess the outcomes campaign, we conducted two mixed methods research projects before (baseline) and after (end line) the campaign. The research included a survey of small-holder farmers, and in-depth interviews with farmers, local Government, suppliers and distributors of solar water pumps.

Overview of Evaluation Design & Research Methods

Evaluation design and research methods overview

Pre-campaign baseline research (May-September 2021)

- 189 face-to-face surveys with target SHFs in Machakos
- 10 in-depth interviews with SHFs
- 10 in-depth interviews with local SWP distributors
- 5 in-depth interviews with local Government officials

Campaign monitoring (late September-December 2021)

Campaign monitoring activities:

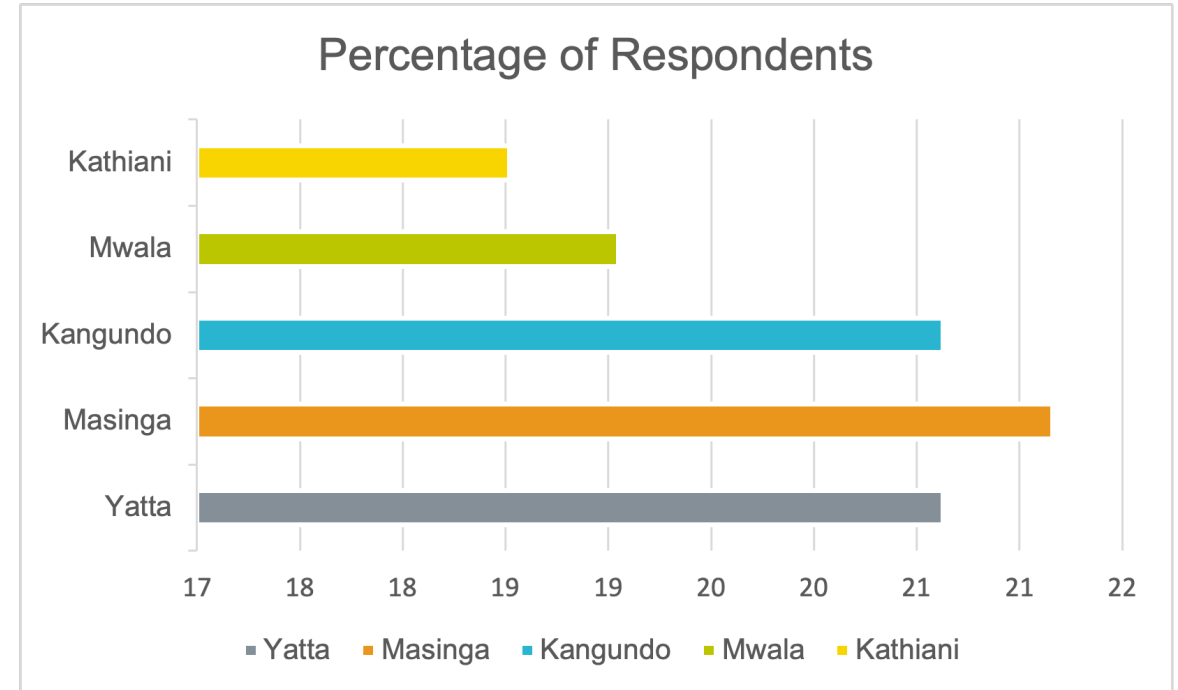
- Radio reach: 3M people
- Household/farm to farm visits: 7,529 households (28,700 people)
- Community forums: 397 forums (6,703 people)

Post-campaign endline research (February 2022)

- 219 face-to-face follow up surveys with SHFs in Machakos (83% of respondents participated in the baseline survey)
- 16 in-depth interviews with SWP aware SHFs, including SWP users and non-users

Overview: Baseline Study

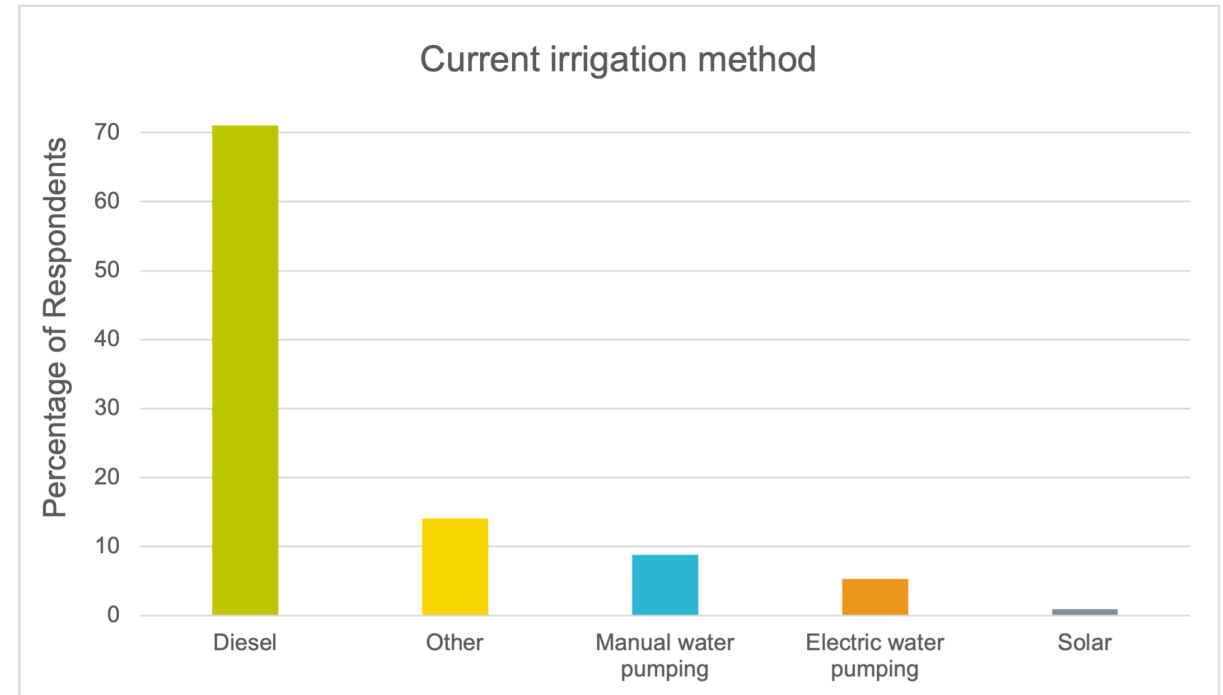
- At the beginning of the project, a baseline study was conducted to inform the design of the campaign strategy in terms of approach, messaging, experience and measurement.
- The study was guided by the following objectives:
 - **To find out and set baseline** for SWP awareness and uptake in Machakos
 - **To unearth practices, attitudes, beliefs** and around SWPs by farmers in Machakos
 - **To assess demand and access** to SWP solutions in Machakos county
- A mixed methodology was employed in the study, employing quantitative and qualitative approaches and tools.
- **A total of 189 farmers were interviewed**, 85 were engaged through focus group discussions while 5 participated in key informant interviews.



The percentage of respondents who participated in the baseline study was well distributed across the five sub-counties.

Baseline Insights

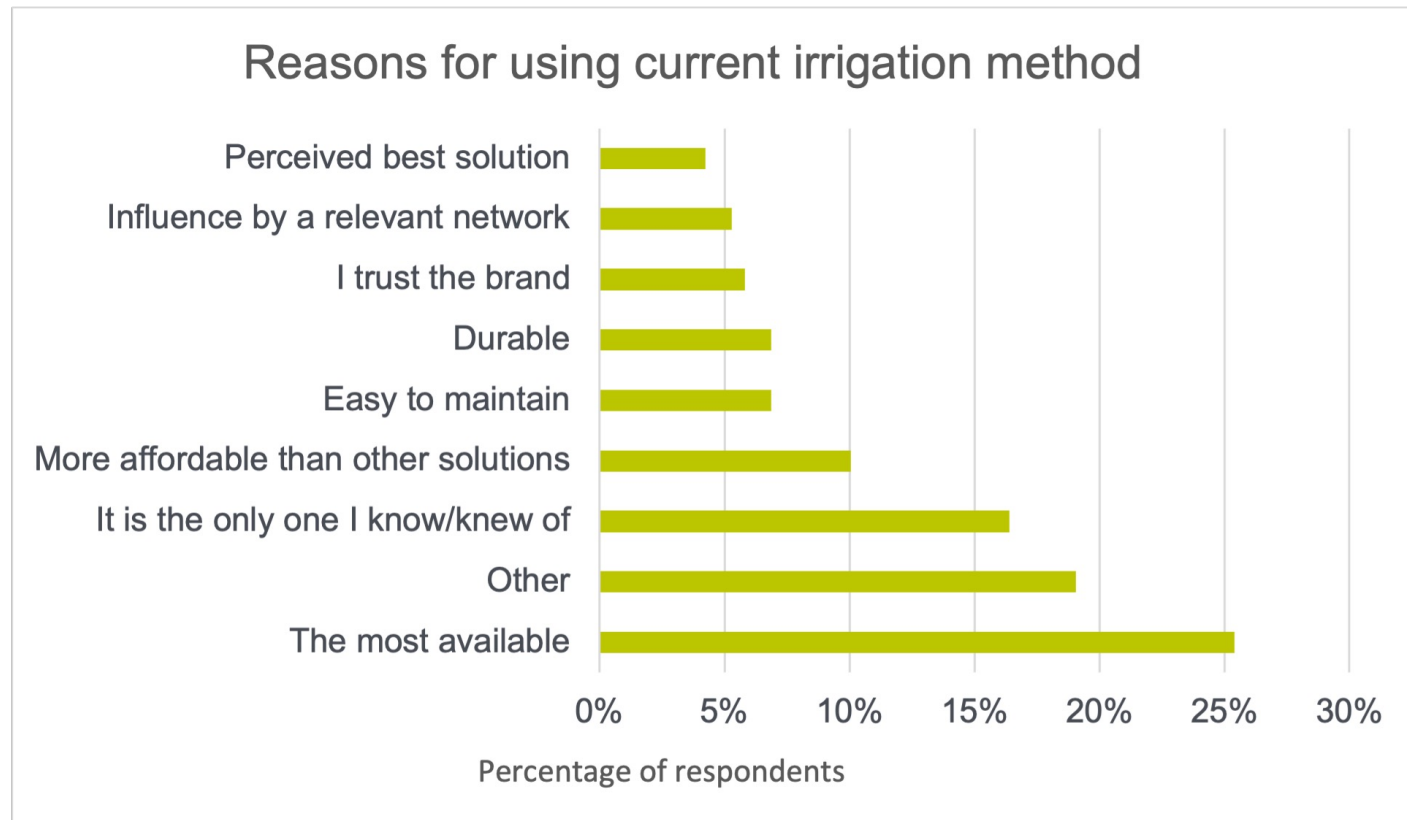
- **At least 60% of the farmers** had been exposed to a form of irrigation farming, with the remaining 40% depending on rain-fed farming.
- **Diesel-powered irrigation was the most popular** form of irrigation among the respondents(71%).
- **Solar-powered pumping was the least popular** irrigation method(less than 1%).
- **Inadequacy and unpredictability of rainfall** were attributed as the most significant challenges facing farmers practicing rain-fed farming.
- **Households surveyed were spending an average of USD 62.2 monthly** on costs related to irrigation. Out of 8 hours spent on farming activities, 5 hours were used exclusively on irrigation.
- **More than 80% of the farmers** produced for both home consumption and commercial purposes.
- **In 3 out of the 5 sub-counties, rivers were identified as the major source of water** for irrigation. In the other 2 locations, dams were the main source of water.



Other refers to petrol pumps, use of motorcycles to fetch water, hand irrigation and donkey carts

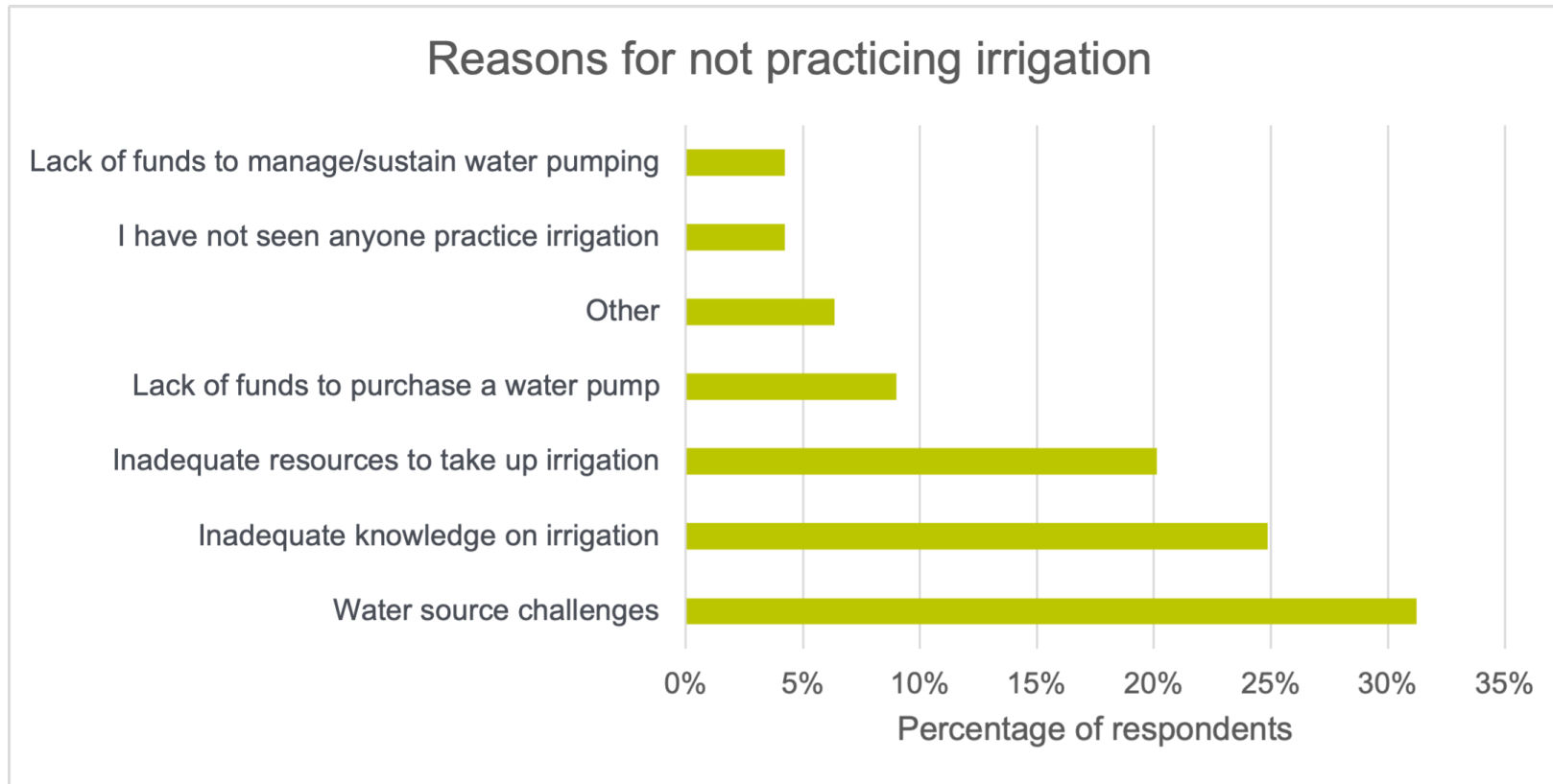
Baseline Insights, ctd.

- **Availability, awareness and affordability** were identified as the key decision levers when it comes to selecting an irrigation method.



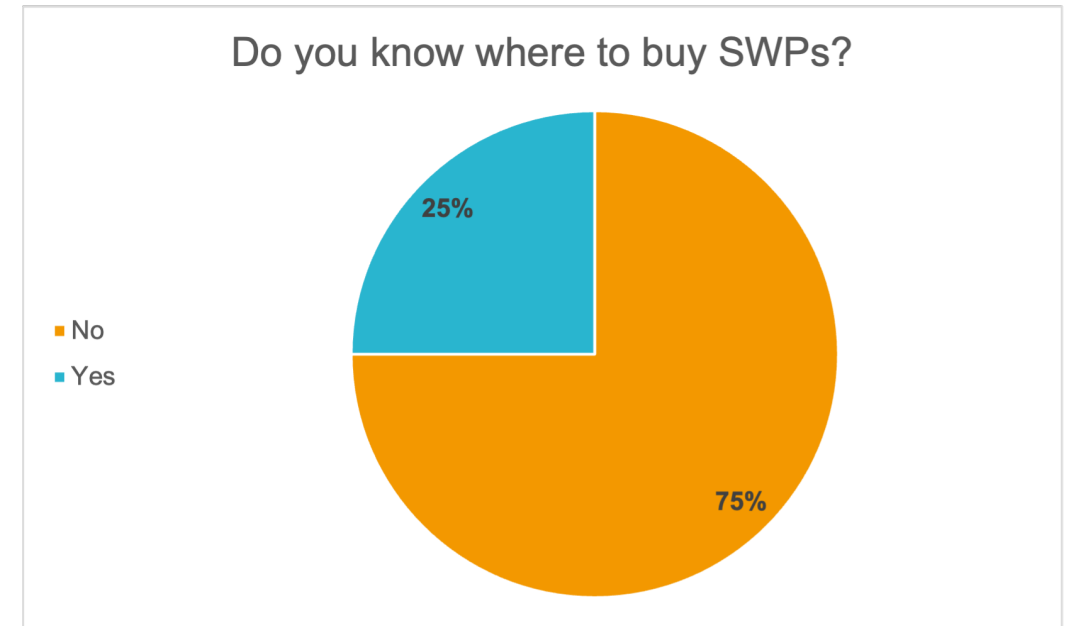
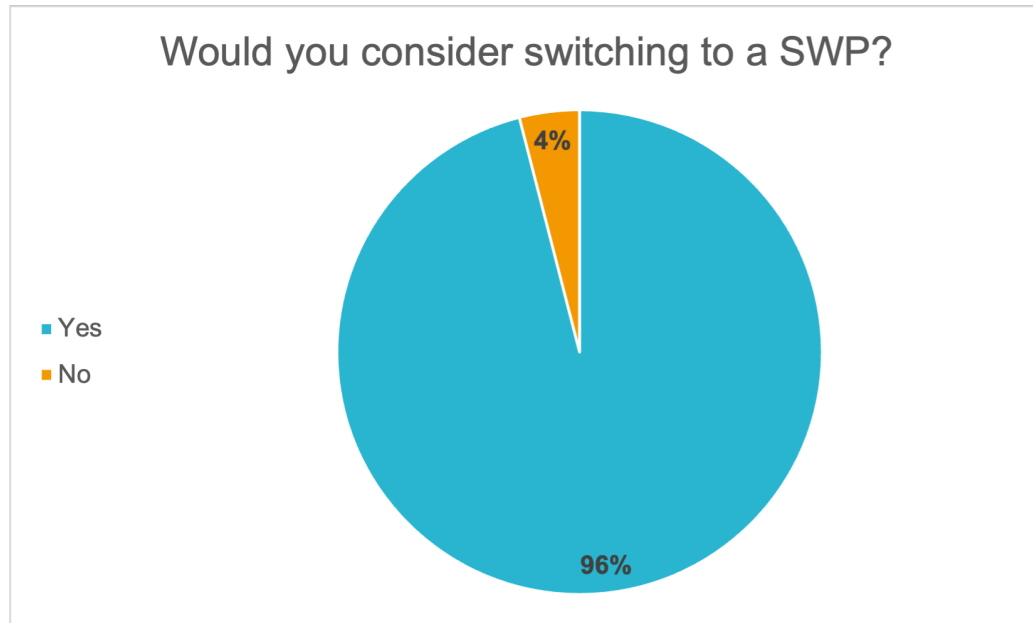
Baseline Insights, ctd.

- Survey respondents practising rain-fed irrigation cited **water source challenges, inadequate knowledge and lack of capital** as the biggest barriers to irrigation adoption.



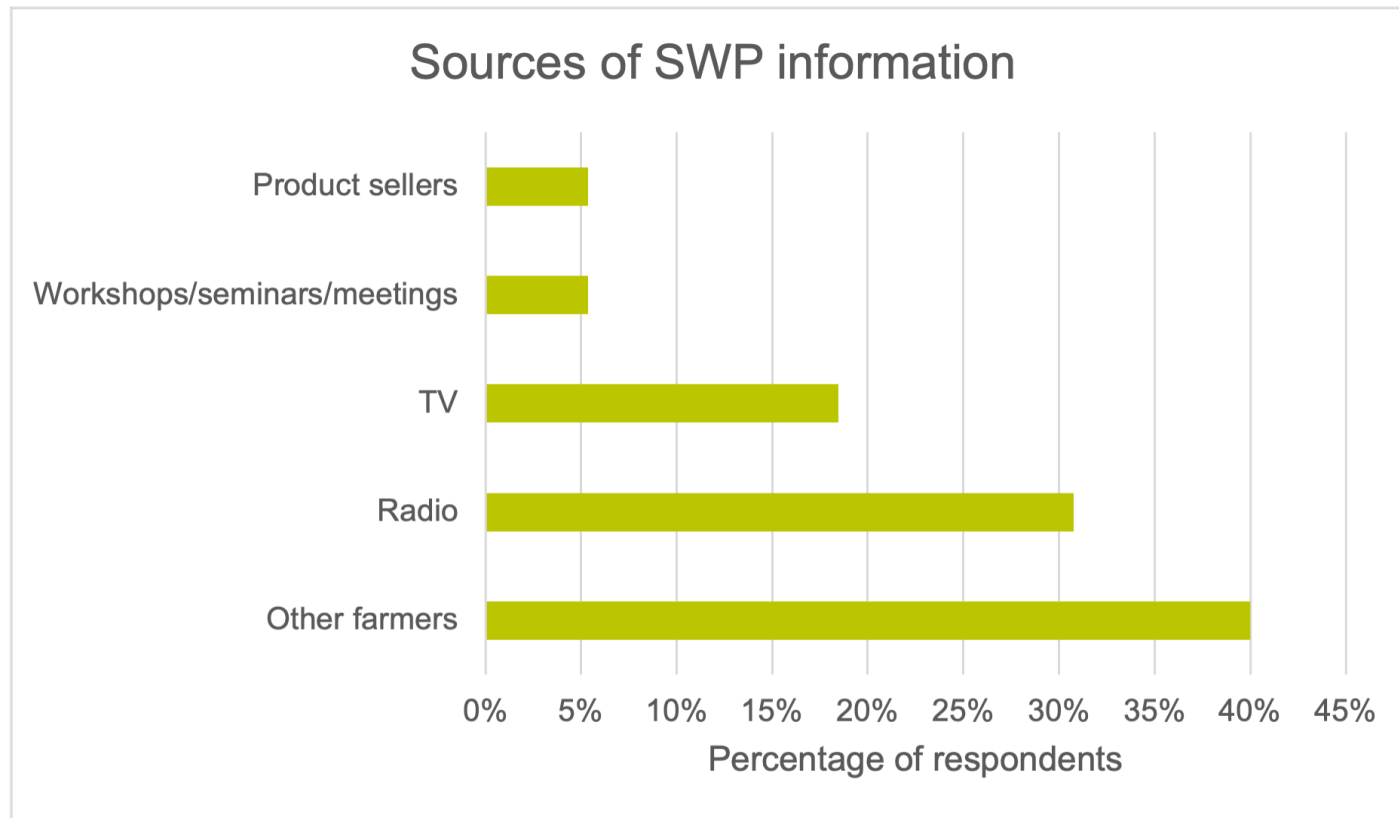
Baseline Insights, ctd.

- Nearly all the farmers said they would consider taking up solar water pumping. However, **only 25% knew where to buy solar water pumps**, indicating a gap in access to information.



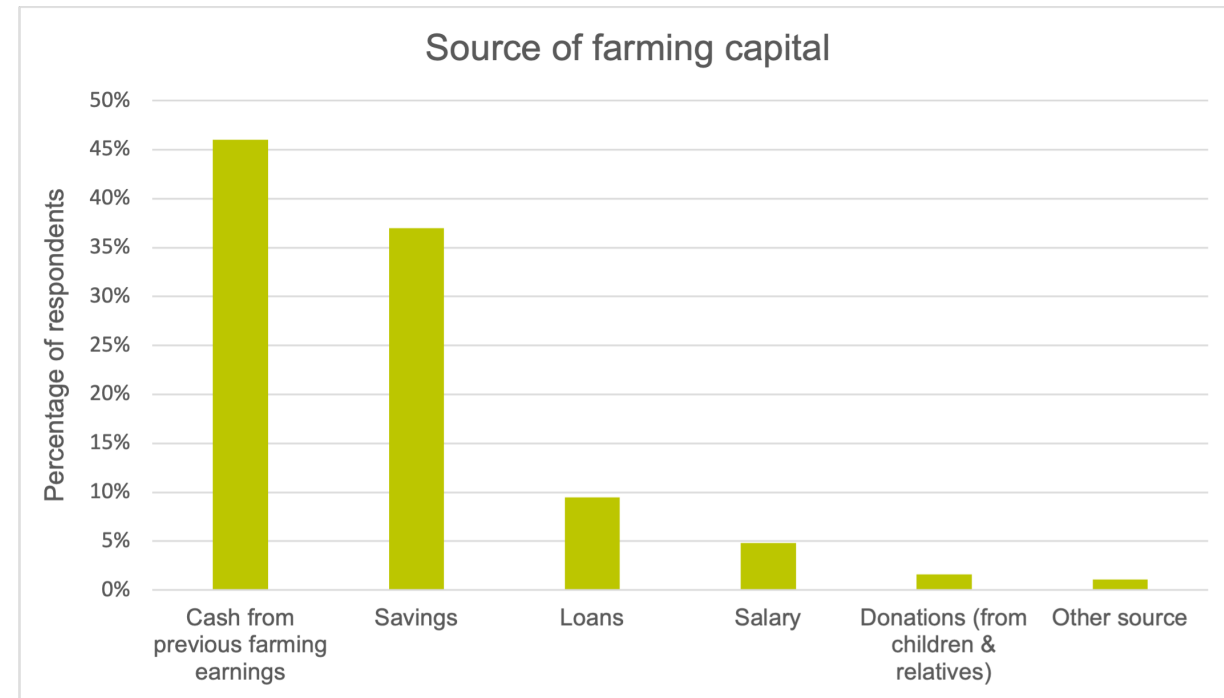
Baseline Insights, ctd.

- **Other farmers (word of mouth)** was ranked as the most popular source of information on SWPs (40%), while product sellers and social gatherings tied as the least popular information sources (5% each).



Baseline Insights, ctd.

- **Earnings from previous harvests (46%) and savings (37%)** ranked as the most common sources of farming capital amongst respondents.
- **Households surveyed were spending an average of USD 62.2 monthly** on costs related to irrigation. Out of 8 hours spent on farming activities, 5 hours were used exclusively on irrigation.
- **More than 80% of the farmers** produced for both home consumption and commercial purposes.
- **In 3 out of the 5 sub-counties, rivers were identified as the major source of water** for irrigation. In the other 2 locations, dams were the main source of water.





Mass Communication and Tailored Direct-to-Consumer Activities

Marketing Activities

To achieve the desired outcomes of the project, the campaign involved several marketing strategies:

- **Radio advertisements** discussing the benefits of solar water pumping for agriculture were aired at least six times a week on two prominent local stations in Kamba (the local dialect) over two months.
- **397 community forums** across the five sub-counties where the Exp team carried out engaging sessions to educate groups of men and women about solar water pumping. These forums had an impressive reach of over 6000 people (with a majority of the participants being women).
- **6489 household** visits for one-on-one engagements with families for awareness-raising and identifying customers who are likely to adopt SWPs for the farming/domestic needs. The reach of the household visits was 16,988 people (not counting children).
- **Product demos by Global LEAP affiliated SWP suppliers** during community events on how to use SWP.
- **Strategic wall-brandings** at market centres in each of the five sub-counties with the campaign slogan 'Kilimo bora, mapato bora na solar water pumps' which translates to 'Great farming, great returns with solar water pumps'.
- **Filming two episodes on Shamba Shape Up**, a local show targeting rural populations in Kenya that tackles expert-covered topics related to farming. One episode featured Water and Energy for Food and discussed the cost savings from switching to solar-powered irrigation. The other episode, featuring a CLASP team member highlights the benefits of SWPs as compared to fuel/diesel-powered alternatives and showcases a pump installation by the SunCulture team. The episodes will air in June 2022.

Community Forums



Image 1: Two facilitators engage with a mixed group in Mwala sub-county



Image 2: Paul engages a women's saving group in Kathiani sub-county

Marketing Activities



Image 3: A branded wall at the market centre in Mwala sub-county.



Image 4: Shamba Shape Up crew on site recording the SWP episode.

Farm Visits



Image 5: Kavita, a farmer in Misuuni showing how he irrigates his farm using a SPIS



Image 6: Samuel, a farmer in Mwala displays his submersible SWP.

Campaign Insights

- Following the baseline findings, **community forums were identified as a good and ideal mid mass engagement platform** that addressed enabling the environment. Exp designed a campaign that targets community members, primarily farmers, male women and youth. This target audience had organized formal and informal groups whose agenda was development, education, welfare, business and self-help.
- The content was designed to:
 - Enable the environment through conversation, leveraging the opportunity to create awareness
 - Drive trials especially with small scale farmer and business groups, by utilizing the opportunity for product demonstrations from partners
 - Through discussions, influence group development agenda by showcasing opportunities for group purchases
 - Leveraging word of mouth for publicity within the target communities
- The study found the **total addressable market in Kenya was 51,199 households**, which is equivalent to 0.42% of the total number of households in Kenya. Using this proportion, the addressable market in the five project sub-counties of Machakos would be approximately 770 households.
- The **campaign's above-the-line activities enabled the project to to exceed the the addressable market** identified as the activities covered the entire Machakos county.

Campaign Reach

Indicator	Target	Means of Verification	Result
Number of people reached via mass media (Radio)	5% of the addressable population. This was set as approximately 700 households based on existing literature	Radio station reach from media review studies	3,000,000
Number of people reached via interpersonal communication channels (Farm visits, small group forums etc.)	N/A	Project activity registers	7,529 household visits 28,700 people reached
Number of community forums/demonstration sessions, Interpersonal engagements, radio broadcasts delivered etc.	N/A	Project activity registers	No of forums 397 No of people reached 6,703

Campaign Reach

Indicator	Target	Means of Verification	Result
Percentage of people found the campaign informative/ increased their knowledge	N/A	Comparison between baseline and end-line	46% increase between baseline and end-line studies
Percentage of people considering or plan to switch to SWP etc.	N/A	End-line survey	95% of farmers who practiced rain-fed agriculture
Percentage of people who found the campaign informative	N/A	End-line survey	80% of the respondents
Percentage of people considering or planning to switch to a SWP	N/A	Household surveys	50% of the respondents



Endline Study Findings

Overview of Endline Study

- At the end of the campaign activities, an endline survey was conducted to determine the effectiveness of the campaign strategy in terms of approach, messaging, experience and conversion.
- The study was guided by the following objectives:
 - **To find out any changes in the set baseline for SWP awareness** and uptake in Machakos County
 - **To assess shifts in practices, attitudes, beliefs and around SWP by farmers** in Machakos between beginning and end of the campaign
 - **To evaluate demand and access to SWP solutions** in Machakos county
- Mixed methodology was employed in the study, employing quantitative and qualitative approaches and tools.
- Semi-structured questionnaires and key informant interview guides were used to collect data from farmers
- **A total of 219 farmers responded** to the survey questionnaire, while 21 were engaged through key informant interviews

Endline Insights

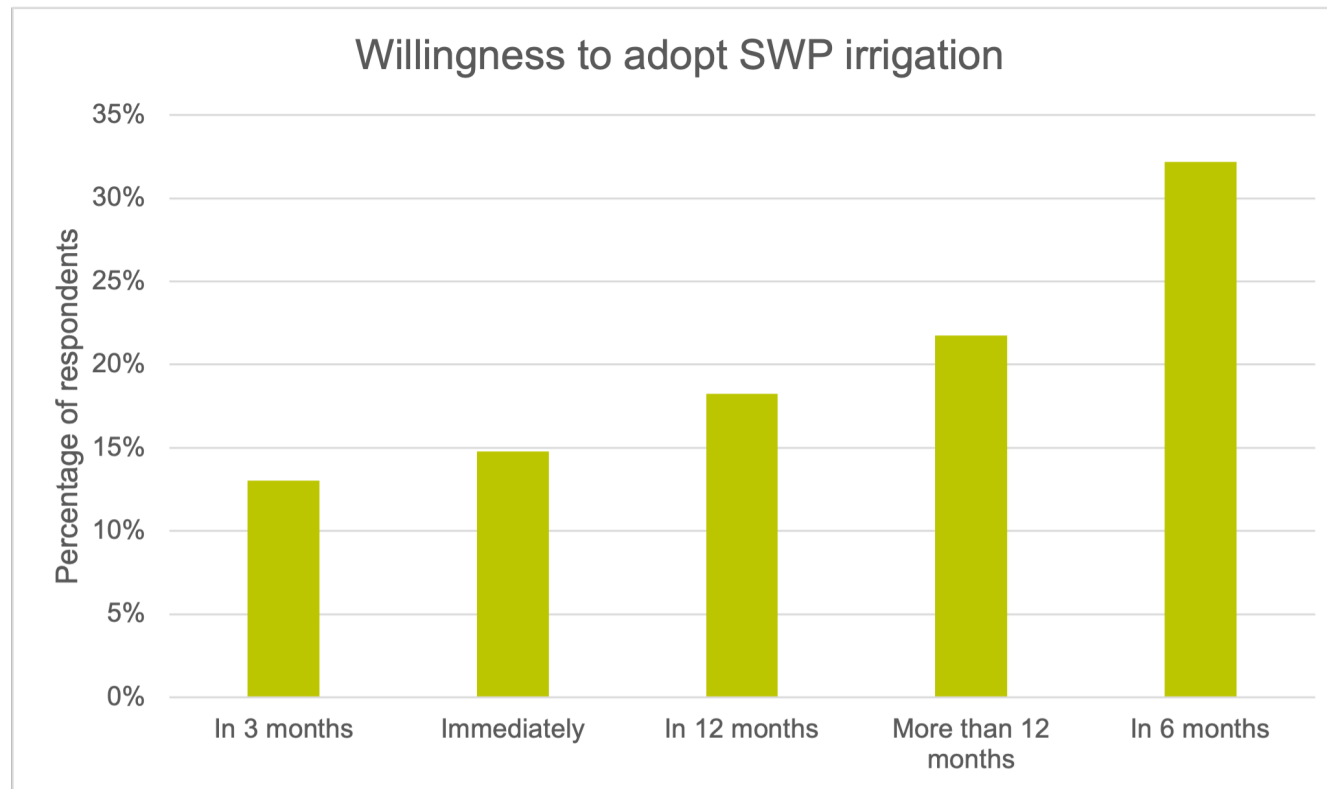
- **SWP awareness levels increased by 46% between the baseline and the end-line.** Only about 5% of the farmers interviewed had not heard about SWPs by the time of the end-line study as compared to 31% that had not heard of SWP during the baseline study.
- Despite increased awareness of the benefits of solar water pumping, the researchers observed **a huge gap in access/supply and brand specific technical awareness among the farmers.** Farmers lacked information on specific brands and their capabilities as well as where to purchase.
- Petrol/Diesel water pumps as an irrigation method remained the first choice for the respondents. They were perceived to be:
 - most durable
 - most available
 - overall best solution
 - easy to maintain
 - most affordable



Image: A diesel-powered pump pumping water from a shallow pool of water.

Endline Insights

- Almost 80% of the farmers would like to take up solar irrigation within one year. Product distributors should design and implement an effective follow-up strategy that provides for a personalized acquisition plan based on the indicative time given by the farmers.



Informant Interviews

- Key informant interviews were conducted with two sets of farmers, those that were using solar water pumps and those who were not.
- **Sixteen farmers participated in the in-depth interviews;** twelve out of the 16 were using solar water irrigation representing 75% of SWP users against 15% of non-users.
- Analysis of the data collected through the in-depth interviews was done both descriptively for quantifiable attributes and thematically for non-quantifiable attributes.
- **Farmers were asked whether they understood and/or related to the messages and material used in the campaign.** All respondents, except one, reported understanding and relating to the SWP messages, especially in the following areas:
 - That the messages were coined around their daily activity-agriculture so was easy to understand and relate with
 - All the farmers had heard about 'solar' (solar energy) but more in terms of lighting as opposed to water pumping. This made it possible for the topic to resonate
 - Some of the farmers had only seen/heard the messages through one channel, either the forums or radio.
 - There were sentiments of the messages not being as detailed as the farmers would want them. To include detailed brand information: Technical, pricing, distributor and others for a number of brands so that the farmers could be able to make an informed choice.

Informant Interviews

- **Respondents were asked whether they gained knowledge from the SWP campaign** and 15 out of the 16 farmers confirmed that they did.
- They were further asked to mention **one key learning** and the following were mostly mentioned:
 - The benefits of irrigation
 - The economical nature of SWPs
 - Technology keeps improving
 - SWPs are simple, only need the sun
 - How to use SWPs to improve my farming profitability
 - SWPs are durable and easy to maintain
 - Information on some of the available brands
- **The farmer who reported that he did not gain any knowledge from the campaign** attributed this to the lack of product demonstrations for practical learning.

“I did not gain any knowledge because the campaign demos never reached us.”

Informant Interviews

- Besides the desired action of purchasing solar water pumps, the **farmers were asked what other action/s they took as a result of the campaign** and their feedback included the following:
 - Taught others about the same
 - Started looking into ways of reducing expenditure on inputs
 - Improved my farming skills
 - Expanded my farm
 - Committed to using different solutions for irrigation
- Farmers who indicated that they owned a SWP had not used them for more than one year. When asked **which brands they knew**, they identified the following:
 - SunCulture (which was the most prominently mentioned)
 - Solamax
 - Solarnac
 - Kickstarter
 - Dayliff

Informant Interviews

- **The reasons for selecting the above-mentioned brands** included:
 - Economical
 - Was a donation
 - Durable
 - Affordable and easy to maintain
- **All farmers using SWPs, except one, reported that the SWPs satisfied their needs.** Here are some of the reasons (verbatim) they gave for satisfaction:
 - I am a full-time farmer so I need produce the whole year
 - Reduced cost of production
 - I use it to pump water not just for irrigation but for other uses as well
 - I irrigate more than I did before
- **The farmers who do not own a SWP attributed this to** the following:
 - Inadequate capital to purchase
 - Lack of information
 - SWPs are costly
 - Diesel/petrol pumps are more durable
 - Because there is no water source nearby
 - Because the land is for leasing

Informant Interviews

- When asked **what information would make their decision to purchase a SWP easier**, the respondents identified the following:
 - Price
 - Mode of payment
 - Availability
 - Pumping power: Distance and quantity
 - Dealer location
 - Technical support
 - Different brands
- While **more than 90% of the farmers interviewed would like to own a SWP**, they are not sure what brands are available within their reach, neither do they know financing solutions within their reach.

Informant Interviews

- The **interviewees indicated that they had experienced the following challenges** when using their SWP:
 - *“I have 2 batteries and one is not working and I don't know where to repair it, the water is very slow you need to be patience.”*
 - *“It's slow and I do not know where to repair SWPs.”*
 - *“It's tedious to switch it on and off daily it can be better if charged to automatically.”*
 - *“Cannot work for a long time and in absence of sun.”*
- **Only 2 of the farmers who owned SWPs knew how to troubleshoot their solar pumps** suggesting that maintenance/after-sale service is the biggest challenge faced by SWP owners.



Key Insights



Stakeholder Engagement

Stakeholder Engagement

- The campaign aimed to engage a broad spectrum of in-country stakeholders to raise collective awareness, and empower other actors (e.g., governments, consumer groups and local NGOs) to carry forward messages about the benefits of renewable energy technologies beyond this period of engagement. The breakdown of local partners for the campaign include:

Partner	Description	Number
County level influencers	Ministry of water and irrigation	2
	Ministry of agriculture	2
Local administrations	Local area chiefs	5
	Sub chiefs	5
Companies	LEIA-affiliated manufacturers and distributors supplying the region	8
Community Influencers	Traditional leaders	4
	Religious leaders	4
	Youth leaders	4
Community mobilisers	Farmers practicing irrigation and local chairpersons for small economic and social groups	10
Media influencers	Radio station presenters	4

Insights from SWP Supplier Engagement

- All Global LEAP affiliate SWP suppliers & distributors active in the Kenyan market (9) were provided an opportunity to participate in the marketing activities
- Most of the companies shared their Product fliers to be distributed among communities in the awareness raising activities
- 3 companies* attended at least one community event to showcase their products. Only one actively leveraged their participation to demo in 4 events

Outcomes

- **Numerous (over 100) sales leads** from the field, in-person and phone follow ups (from the radio advertisement) received by companies (i.e., those actively engaged in the campaign)
- However, **zero sales conversion by all companies** owing largely to mismatch in the customer price expectations and the product price. This underscores the opportunity to pair awareness-raising activities and Results-based Financing mechanisms in the future.



Lessons Learned & Recommendations

What worked well?

From the monthly community engagement activities, this is what worked well:

- **Collaborating with local government:** Involving local administration (chiefs and assistant chiefs) worked well in profiling and identifying the right target audience and groups within the community.
- **Farm to Farm:** Door to door activations enabled the team to gather insights from household heads and triggered farmers to start thinking about the uptake of solar water pumping.
- **Leave behind IEC materials:** The brochures issued at the forums helped increase community knowledge since participants could refer to the IEC materials and make follow up calls for further inquiry from the facilitators.
- **Incentives:** Issuing branded merchandise (t-shirts) motivated the contact people who organized and ensured that the team met the scheduled group.
- **Influencer engagement:** Working closely with local farmer influencers motivated many farmers/community members to learn about the usage of solar water pumps. The influencers' success stories increased their interest in owning one.
- **Product demonstrations:** Carrying out demonstrations during field visits by representatives from a Global LEAP affiliated manufacturer enabled the community to connect with the campaign content.

What worked well?

- **Farmer success stories:** Sharing success stories and conducting farm visits during the engagement sessions encouraged community members to consider embracing SWPs for improved farm yields.
- **Use of the local language:** Facilitating the engagement sessions in Kamba and Kiswahili made it easier for the community members to participate in the discussions actively.
- **Campaign tag line:** "*Kilimo bora, mapato bora na solar water pump*" was well received and captured the audience's interest.
- **Product knowledge:** Ensuring facilitators were well versed in solar water pump information helped them deliver the right message to the community.
- **Incentives issued to community leaders** encouraged them to mobilise groups within their target areas with ease.
- **Buy in of contact persons:** Sustaining communication with community contact persons helped keep them committed to the programme and will sustain communication beyond the programme's life.

What was a challenge?

These are challenges identified during the monthly campaign activities:

- **Access to products:** Proximity to products is a barrier to increased adoption of SWPs. The nearest access point for SWPs is Machakos town, which is a distance from the sub-counties, creating an additional cost over and above the purchasing price of the product.
- **Difficulties accessing water sources:** Rivers and dams are the primary water sources in most parts of Machakos County, yet they are not easily accessible, hindering the solar water pump uptake amongst community members.
- **Few IEC materials:** During community engagement activities, participants who missed out on partner IEC materials, such as fliers, were demotivated as they felt they were missing out on vital referral information.
- **Collecting personal information for follow-ups/engagement tallying:** Due to the upcoming campaign season, several participants were hesitant to share their contacts details, e.g., phone numbers.
- **Demonstrations and follow-ups:** We had fewer partner companies showcasing their products than expected and few follow-ups on potential sales from interested community members and farmers.
- **Busy farming season:** Our target audience mainly comprised farmers who were busy attending to their farms in preparation for the rains. The facilitators had to adjust their activities around the farmer's availability.
- **The expectation of handouts:** Community members are used to getting money rewards when invited to public forums, and some opted not to attend the sessions because there were no cash allowances.
- **Lack of product pricing information:** Community members were keen to know SWP prices. However, associates from participating companies did not share the cost of their products, contributing to an information gap.

5 Key Recommendations



1. Avail product financing/purchase plan options for consumers

- The community members expressed a need for affordable payment plans that offer credit facilities to make SWPs more accessible and improve their uptake.
- To increase adoption, it is proposed that manufacturers and distributors sell certain products at subsidized rates. These discounts will incentivize sales, especially for those purchasing in cash.
- Manufacturers and distributors are encouraged to explore partnerships with financial institutions for example, farmer saccos, local banks and telecom operators to enable flexible payments for registered banking groups and individuals.



2. Develop and leverage local distribution networks

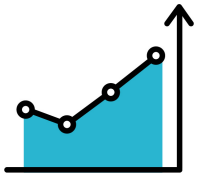
- To enable ease of access and convenient follow-up on sales opportunities, it is recommended that manufacturers work closely with partners to onboard local retailers or distributors. This will reduce the hassle of consumers travelling to the nearest town, Machakos or Nairobi, for purchases.
- Training community champions, leaders and influencers as key contacts on SWP information price, models and capacity will also address the knowledge gap at a local level.

5 Key Recommendations



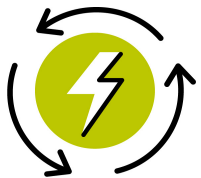
3. Utilise mass media for increased reach

- Community radio worked well as an engagement tool for reaching the masses. To increase the efficacy and measurability of engagement activities, other media approaches, like farmer programs or an edutainment drama series covering a day in the life of a farmer can support increased awareness on the benefits of SWPs.



4. Implement a longer campaign for better demand creation, recall and impact

- For better measurement of impact, it is advisable to design a campaign that stretches over a longer duration, for example 2-3 years. This would help with follow on messages and to keep farmers who are interested but unable to purchase immediately engaged.



5. Design a sustainable campaign that can run beyond the face-to-face engagement duration

- In future, a more holistic campaign design that employs additional activities such as agricultural shows, farmer, partner workshops would support and sustain the initial awareness messages of the SWP Campaign. These activities could run quarterly or bi-annually.
- It is also recommended that influencer farmers are on-boarded on a platform for regular sharing of information on the technology and enabling interaction to get feedback on challenges and other available opportunities.



To learn more about the campaign, [watch this 4 minute video](#). If you have any follow up questions or feedback, please reach us at info@efficiencyforaccess.org.

We also welcome inquiries about partnering on a similar campaign.