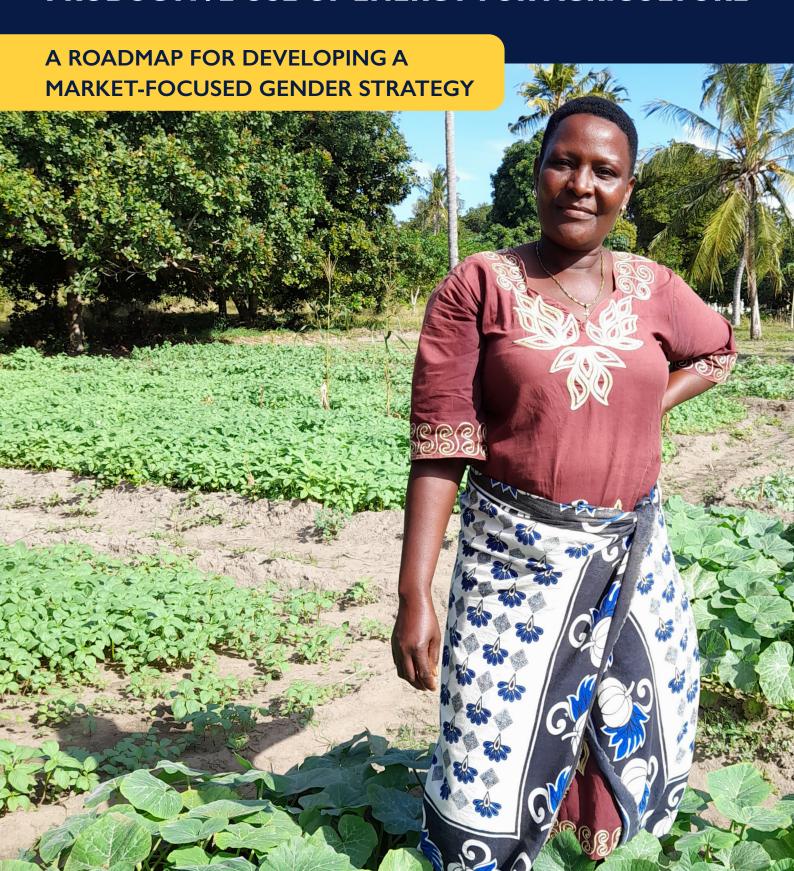




## INCREASING WOMEN'S ACCESS TO PRODUCTIVE USE OF ENERGY FOR AGRICULTURE



# **DISCLAIMER:** This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of RTI International and do not necessarily reflect the views of USAID or the United States Government. This report was prepared under Contract Number AID-720-674-18-D-00004 / AID-720-674-19-F-00005. PHOTO CREDIT: Gisela Ngoo. **ACKNOWLEDGEMENTS:** RTI International is grateful to have worked with Simusolar, and we thank everyone who researched, developed, and reviewed the content of this resource. Special thanks to Silvia Emili, Inka Schomer, Gisela Ngoo, and Lili Ilieva at E Co. for compiling this roadmap.

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#### I. INTRODUCTION

#### I.I About this roadmap

This roadmap is a step-by-step guide for off-grid clean energy companies to identify and adopt strategies to serve female customers more effectively. The roadmap was developed by the Power Africa Off-grid Project following a pilot with Simusolar to develop a market-focused gender strategy. The complete gender-focused market assessment and strategy resulting from the pilot is also available. The Power Africa Off-grid Project is grateful to Simusolar for its collaboration and willingness to share the lessons and tools in this roadmap.

By following this roadmap, your company can gain a deeper understanding of female farmers' demands and challenges—distinct from those of men—in gaining access to productive use of energy (PUE) technology. This roadmap shows how prioritizing gender equality in business operations can increase women's access to PUE.

#### What is a market-focused gender strategy and gender action plan?

A market-focused gender strategy is a document that guides a company toward achieving goals to improve gender equality within the business and in sales. The strategy is based on market research focused on female customers and PUE supply and demand.

Part of this gender strategy is the **gender action plan**, which demonstrates how your company can achieve the strategy's vision of gender equality. The gender action plan is a set of activities, targets, and expected results for your company.

#### Developing a market-focused gender strategy will help your company to:

- Identify new customers.
- Understand women's distinct energy access needs.
- Develop products and services that serve women.
- Identify new channels and partnerships to reach women.
- Increase market reach, sustainability, and financial performance.
- Engage with gender lens investors including 2X Challenge-participating development finance institutions.

This roadmap culminates in a market-focused gender strategy that your company can implement to provide products and services that meet the needs of female farmers. The gender strategy outlines actions that your company can take to better serve female farmers with productive uses of energy.

#### 1.2 Enhancing women's agricultural productivity through energy access

With access to cleaner, more affordable, and more reliable energy services, entrepreneurs, micro-enterprises, and farmers in sub-Saharan Africa can generate jobs, income and, thereby, promote local development. Moreover, energy access can support and enhance the profitability of women's enterprises by extending the working day or enhancing agro-processing, manufacturing, or service delivery. PUE technology such as solar-powered water pumps and grain milling machines can allow women to set up their own small or micro-enterprises or increase their leisure time by reducing time and labor spent on farming. Promoting PUE among women and offering financing to help them purchase larger or more energy-efficient appliances can, gradually, increase energy companies' market share and financial viability.



#### Barriers women face in gaining access to PUE

- Unequal access to resources, such as land, collateral, and finance.
- Cultural norms leading to limited participation in household and community decision-making.
- Limited exposure to training and information.
- Unequal labor burden of unpaid household work, care for relatives, and collecting wood for fuel.

These inequalities lead to time poverty.



## 2. FIRST STEPS FOR DEVELOPING A MARKET-FOCUSED GENDER STRATEGY

#### 2.1 Ensuring leadership and team buy-in

Prior to developing a market-focused gender strategy, prepare your company to take action on gender equality by:

- Ensuring buy-in from senior leadership, which is critical to effect change in the organization.
- Identifying an internal champion who is responsible for coordinating and implementing the gender strategy.
- Sourcing expertise by hiring one or more gender experts to collect and analyze company data and to lead the strategy's development.
- Communicating across the company's departments on the plan for developing a gender strategy and its aims.
- Setting expectations across business units, ensuring that that credit teams, sales, and human resources (HR) are prepared to share information and to participate in interviews and team discussions.

#### 2.2 Making a plan

Embarking on this gender journey means working to achieve two main outcomes:



Understanding gender differences in PUE demand and access.



Identifying market access barriers that women face and finding ways to lower them.

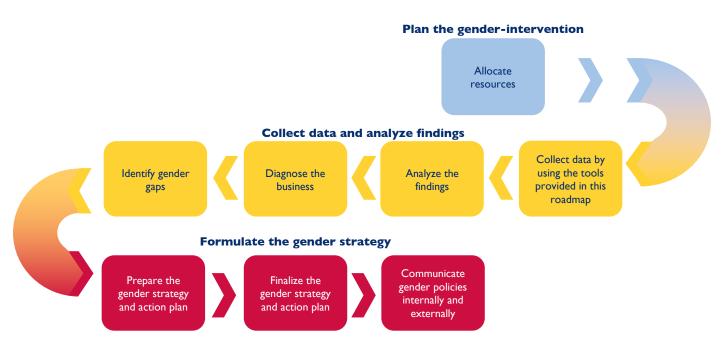


Figure 1: A roadmap to develop a market-focused gender strategy.

## 3. UNDERSTANDING YOUR MARKET

#### 3.1 Understanding the needs of your customers

## Companies can understand gender disparities in PUE supply and demand by investigating the following questions:

- What are women's roles in agriculture, and how do they overlap with women's roles in the household?
- What are women's energy needs and how can PUE improve women's experience of farming?
- How easily can women gain access to energy services, technology, and distributors? How many women control this energy supply?
- Do your company's product financing models cater to women and, if so, how? Has your company considered partnering with MFIs, group lending mechanisms, and cooperatives?
- How easily can women obtain information about PUE, extension services, and training in entrepreneurship and technology?

Focus group discussions (FGD) and interviews in the field are useful ways to gather information about existing and potential customers. Methods for conducting FGDs and interviews are included under Tools I to 4 in the Annexes.

#### Your company can interview the following stakeholders:

- Female farmers and business owners (both customers and non-customers): Interviewees can be drawn from owners or users of your company's PUE products and those who may be interested in them. The interviews will aim to understand subsistence and commercial farmers' level of interest in your products. Customers should be asked about their likes and dislikes in dealing with your company and products, whereas non-customers can be asked about their farming practices to determine demand (see Tools I and 2).
- Company partners such as agricultural organizations and financial service providers: Interviewing company staff about organizations that they interact with frequently can reveal partnerships or help your company to formalize them. Partners can include agricultural organizations and financial service providers such as microfinance institutions and mobile money providers (see Tool 3).
- Local government: Interview local government representatives or workers to understand support and services available to women in the regions where your company does business. Seek information on training available from government or non-government sources, financing, business development services, skills and knowledge development, and other private companies promoting PUE (see Tool 3).
- Staff: Staff interviews should aim to understand which customers your sales team prioritizes, the services the company offers, its strategies to reach women, its financing models and payment structures, and the requirements of female staff (see Tool 4).

#### **Criteria for selecting FGD locations and participants**

Consider the following criteria when identifying locations for FGDs and interviews:

- Presence of value chains relevant to your company's products.
- Presence of women's associations, cooperatives, and formal and informal lending schemes.
- Convenience (i.e., a place accessible to women and where your company has a presence).
- Areas identified in previous feasibility studies or where there is shallow ground water or a river (if supplying water pumps).

FGD participants can be selected based on the convenience of getting them in one location such as in one village or ward. The participants can include male and female customers and non-customers. Consult your company's staff when identifying participants.

#### 3.2 Using the data collection tools

To collect data to enhance your company's gender strategy, use research methods such as primary data collection, interviews, FGD, and surveys. Prioritizing female entrepreneurs, farmers, and representatives of cooperatives will reveal gaps in the market for PUE and financing. See Tools 1 to 3.



#### See Tool I:

Focus Group
Discussions guidance



#### See Tool 2:

Interviews with farmers



#### See Tool 3:

Interviews with partners

#### 3.3 What data to collect

Your data on customers and non-customers should comprise the points below. Once the data has been collected, use the findings from the fieldwork to describe customer demand in detail.

#### **Demographic profile**

- Age
- Marital status
- Household structure
- Education

## Demand, needs, and farming practices

- Experience with farming
- Type of farming (e.g., subsistence, commercial, or both)
- Farm sizes, land use, and types of crops
- Irrigation practices
- Men's and women's different roles in agriculture
- Access to markets
- Aspirations

## Agency and decision-making

Primary sources of financing

Experience with loans and banking

Income and access to finance

Investments in farming activities (e.g., land,

Affiliation with savings and lending groups

Main income sources

labor, and inputs)

- Household decision-making on land, cultivation, and how to spend agricultural income
- Gender roles and dynamics involved in buying technology
- Men's vs women's perceptions of investing in their farms

#### Access to information and services

- Access to mobile phones
- Access and use of extension services and agricultural support
- Links with agricultural groups, cooperatives, and NGOs

#### **Technology use and awareness**

- Frequency of solar technology use
- Primary and secondary users of a PUE product
- Challenges in using PUE
- Perceived benefits from using the technology



#### 3.4 Understanding female customers and building customer personas

The quantitative and qualitative data collected as part of the previous section helps your company to develop customer personas. The customer personas will describe your company's female customers and can be used to inform the actions in the gender strategy.

#### What is a customer persona?

A persona is a design and marketing tool. It is a fictional character created to represent a user-type who might use a product or a service in a similar way. Personas can be used to represent entire market segments.



Farm size: Three acres.

**Agricultural practices:** Grace farms tomatoes, peppers, onion, green banana, and rice. Grace relies on a shallow well and a nearby pond. She pays workers to fetch the water with buckets and irrigates her farm on average twice a month.

**Sources of income:** Farming and other business. She has crops and animals and sells outside of her community.

**Needs:** She rents a fuel-powered pump and invests a considerable amount of money to irrigate her crops.

**Financing/ability to pay:** She spends about \$1,290 a year on her farm. She has taken loans of \$430 in the past, and saves \$10 each week.

**Aspirations:** Grace aspires to the reduce cost and labor demands of her farm. In the future, she would like to expand her farm and cultivate more cash crops. She has a bank account, but has not taken agricultural loans before.

**How Simusolar can meet her needs:** Simusolar can meet Grace's irrigation needs by supplying a small pump for her farm plot and a medium pump so that she can extend her farm. Simusolar can combine training on pump use with capacity-building by putting Grace in touch with its partners.

Figure 2: An example of a customer persona.

#### 3.5 Understanding the supply-side

Another aspect of the market assessment is understanding how your company is positioned against other PUE suppliers, and which products and services are available on the market to meet women's demand for technology, financial services, and information. As part of assessing the supply-side, your company can gather information on organizations that are successfully working with female customers and female farmers in your region of interest. The supply-side analysis should cover the following areas:

#### **PUE products and service providers**

- Suppliers of products and PUE equipment similar to your company's.
- Business models used to reach women.
- Agricultural input suppliers (e.g., seed suppliers) that provide dedicated products or financing for women.

#### Financial service providers

- Availability of financial providers (MFIs, SACCOs, commercial banks) and their financing terms
- Business models of financial providers serving female customers and farmers

#### Agricultural information and training providers

- Channels used for getting information on agricultural practices and technology
- Presence of NGOs and agricultural organizations that have strong links with the community



#### 4. SERVING WOMEN BETTER

#### 4.1 Identifying market entry points to serve women

The findings from the market assessment and field work, coupled with your company's gender assessment (see Section 5), will reveal ways to reach women in the market more effectively.

Such entry points include:

- Marketing: Identify the groups or regions less aware of your products and develop inclusive messages to reach a broader customer base. Your marketing strategy should focus on behavioral change and be sensitive to financial literacy levels, product preferences, and differences between men's and women's patterns of using media (such as television, radio, and social media).
- Sales and distribution: Analyze the difference in performance between male and female sales agents and implement inclusive sales approaches. To do so, identify and develop strategies to overcome the time and mobility constraints of your company's female sales agents and ensure that their working environment is safe.
- Consumer finance: Design accessible financial products by offering asset financing, microfinance, and pay-as-you-go (PAYGO) models that cater to women's patterns of asset ownership and income.
- After sales and customer service: Ensure that your company supports female customers to use their products effectively and to troubleshoot problems.
- **Research and development:** Design and supply technology that benefits women by reducing drudgery and saving time, and that are optimized for female-dominated agricultural activities.
- **Partnerships:** Partner with savings groups and agricultural cooperatives. These partnerships should help your company understand how women are involved in the structure of these organizations. This knowledge will allow you to design capacity-building for women involved in groups that deal with or finance PUE.
- Workforce development, employment, and company culture: Develop a recruitment and retention strategy that focuses on women and disseminate information on job opportunities to women's professional groups. Consider introducing flexible working conditions and ensuring transparent criteria for career advancement, equal pay, and a safe working environment.

### 5. ASSESSING YOUR COMPANY

#### 5.1 Identifying gender gaps by assessing your company

Assessing how gender is considered in your company, business model, marketing strategies, and product range will reveal the areas where your company can be more gender inclusive.

Your team should review the following business areas through a gender lens:

- Workforce and HR practices: Assess how the company's norms and workplace practices affect
  your employees and customers. For example, a male-dominated sales force may be more inclined to
  engage men or prospective female customers may not feel as comfortable speaking to them about their
  financial situation or to ask questions about the technology.
- **Consumer financing:** Investigate payment plans and analyze gender differences in the options that customers choose; compare men's and women's ability to pay through cash sales.
- **Sales strategy:** Outline your sales strategy to see if your distribution channels lead to male-dominated markets.
- Marketing strategy: Identify disparities between women's and men's access to information, mobility, and literacy. Review your marketing materials and strategies to identify shortfalls in speaking to women's demands and aspirations.
- **Customer relationships:** Investigate how your company fosters relationships with its male and female customers. Does your company support customers throughout the lifetime of their products and does it build trust in agricultural communities? Does your company offer dependable after-sales service and product training for users?

The assessment will involve reviewing the company's strategic documents, marketing material, and customer contracts, and will require interviews with personnel.





## **6. DEVELOPING A GENDER STRATEGY**

#### 6.1 Validating the gender strategy through an internal workshop

Support from staff in your company is crucial for implementing your gender-inclusion strategy. The strategy should be validated through a workshop with staff where the aims of the gender strategy will be discussed.

The following tools can be used to develop a workshop to validate the strategy that draws on the field work and desk-based research.

**Unpacking the customer journey:** A useful starting point is to ensure your team's understanding of every customer's experience at each stage of the customer journey. Creating a customer journey map can help you and your company visualize how customers feel at different stages of obtaining and using a product, such as when they interact with your sales team or marketing material. Creating a customer journey map puts you in the shoes of a female customer to see where your company may have missed the mark and where it can improve customers' experience.



**Prototyping:** Prototyping your company's gender strategy requires building, testing, and reworking it until it solves the company's shortfalls in gender inclusion identified by your self-assessment. Prototyping is an iterative process that should include diverse ideas from your team, which should be incorporated in the final gender action plan.



#### 6.2 Developing the gender action plan

Once the strategy has been validated, you can start drafting a gender action plan based on the gender gaps identified. The gender action plan is a roadmap with interventions and goals that strengthen gender equality. It is a key component of your unique market-focused gender strategy. It should include your company's vision for gender inclusion and include objectives and time-bound actions to implement over the short to long term.



The gender action plan will help your company to hold departments and staff accountable for gender-inclusion. Leadership commitment is necessary, and your company should allocate staff time and a budget to achieve results. An example of a complete gender action plan is provided in Tool 7.

## 7. COMMUNICATING YOUR COMMITMENT TO GENDER EQUALITY

#### 7.1 Formulating a communication strategy

Once you have developed the gender strategy and action plan, your company should implement a plan to communicate your commitments to internal and external audiences. Internal communication ensures that all staff are aware of the company's policies and understand how to comply.

**Internal communication plan:** This can include a staff newsletter and a presentation of the gender strategy at all-team meetings. The gender strategy should be integrated into departments' quarterly and annual strategies.

**External communication plan:** This involves communicating your company's intentions to external audiences. Your company should communicate the gender inclusion statement and advertise the actions you are taking as a company to achieve gender inclusion. Communication channels include social media, external newsletters, and your company's website. Communicate your gender-related commitments to your investors, too.

#### 7.2 Developing outputs with key messages

When communicating your gender strategy and action plan, you can formulate messages that convey your company's intentions. These messages should involve:

- A gender equality statement that describes your company's gender equality vision, aligns with your mission, and describes what your organization does to close gender gaps.
- **A "why" statement** that describes the reason for your company's commitment to gender equality.
- A "how" statement that provides a clear outline of the initiatives and processes that you have put in place to achieve gender inclusion. These initiatives can be your efforts to reach more female customers, track sex-disaggregated data, and develop new products and services that meet women's needs. The "how" statement should include your company's reporting and monitoring protocols for the gender strategy, and your plans for the period beyond the timeline of the strategy.

### **ANNEXES**

#### Tool I: Holding mixed-group or women-only focus group discussions

The tables below propose a structure for focus group discussions (FGD) with customers and non-customers (female and male). Questions regarding solar water pumps are illustrative only. Replace references to solar water pumps with the technology that is relevant to your company.

- Establish a baseline: Begin the FGD by asking a series of introductory questions to determine the
  participants' farming practices, levels of access to resources and information, their income generating
  activities, and PUE needs. The answers to these questions should be compared to the desk review
  findings.
- 2. Discover farmers' levels of interest in company's products and services: These questions explore the participants' needs and farming aspirations to determine their demand for PUE (a useful question for non-customers).
- 3. Enquire about other market gaps: This category of questions will encourage participants to discuss anything else that they would like to see from PUE suppliers or to explain other services they need.

Participants' answers will reveal ways that your company can meet their demands.

#### **Steps:**

Step	Time
I. Introduction: The interviewers introduce themselves, explain the purpose of the FGD, and establish ground rules.	
Guidelines: Inform participants that there are no right or wrong answers, only different point of views. Participants do not need to agree with each other but must listen as the group members share their views.  Notify participants that the interviewers are recording the discussion and taking notes. Participants should not speak over each other.	10 min
The moderators should explain their role and guide the discussion by encouraging participants to talk to each other.	
2. Establish the baseline (determine agricultural practices, income generation, and energy needs—see the example questions below).	25 min
3. Discover farmers' levels of interest in company's products and services.	15 min
4. Enquire about other market gaps.	15 min
5. Conclude the discussion, summarize the topics covered, and review the purpose of the study.	5 min
Total time	1.10 h

Supplement FGD with surveys to gather more information and quantitative data. Identify participants in collaboration with your company's field staff and stakeholders. Record the FGD to ensure that it can be analyzed later and consider having a staff member monitor the FGD via telephone. Below are example questions for FGD.

#### Questions for mixed-group or women-only FGD

#### Participation in agriculture and farming practices

What are the major income generating activities of your household?

What are the main agricultural activities that you are engaged in? Do you cultivate crops or farm with animals?

What crops do you grow? / What animals do you have?

Why have you chosen to grow those crops? Are they easier to cultivate than other crops?

Why are you growing the crops / Why are you raising these animals (for subsistence, market, or both)?

Is your farm irrigated or rain-fed?

When do women and men work together on your farm? For example, do they work together when preparing the land, cultivating, harvesting, and selling?

How much time do you normally spend on each stage of farming; for example, cultivating, harvesting, and selling?

What will improve your farming?

#### **Decision-making**

In your household, who decides which crops to cultivate?

In your household, who decides to sell the crops, who determines the price, and who chooses the market to sell at?

In your household, who decides to invest to improve the farm?

How does land tenure work where you live? (Do women have access to land? Are women allowed to buy and own land? Can they decide how to use the land)?

#### Interest in company products and services

What energy technology (for example, solar home systems, lamps, solar pumps, diesel, kerosene) are available where you live?

Do you know the benefits of using solar energy in farming and specifically of using solar water pumps? [NB: Your company can enquire about a different product.]

Do you know how solar pumps work?

Do you use a solar water pump? If so, which brand?

How did you buy your solar water pump?

What do you use the pump for? Domestic use, irrigation, or mixed use?



What made you buy the solar water pump and how did you learn to use it?

What you like or dislike about the pump?

What difference has the solar pump made to your life?

What do you find difficult in using the solar pumps? For example, how easy is it to maintain the pump or find information on it? Do women and men have the same difficulties in using the pump?

What other products and services are you interested in? [Ask about types of products, payment plans, and market-access services.]

If you have savings, what would you like to use them for?

#### Other demands and market gaps

What are your main sources of information on farming?

What else do you need for your farm or your business?

#### **Tool 2: Interviewing and surveying farmers (customers and non-customers)**

This tool guides interviews with farmers who own PUE (solar water pumps are used as an example) and with those who have not yet purchased this technology. The interviews aim to understand subsistence farmers' and entrepreneurs' motivations for buying or not buying PUE. Interviews with customers will focus on eliciting their likes and dislikes in dealing with your company and products, whereas non-customers can be asked about their farming practices to determine their demand. Identify participants by using your company's customer database and by collaborating with your company's field staff.

When analyzing the participants' responses, compare men's and women's statements to determine gender differences in agricultural practice, PUE demand, and product use.

#### Introductory statement for interviews

The interview seeks to understand female farmers' needs and aspirations and how they can benefit from productive uses of energy. We are conducting this study in the regions of [insert regions]. Our company and staff will keep all your responses CONFIDENTIAL.

Feel free to interrupt or ask for clarifications during the interview. We will use your responses to describe the needs of different types of female farmers, and to understand how their demands can be met by solar-powered productive uses of energy.

#### Interviewing company customers (female and male)

#### Participation in agriculture and farming practices

What are the main economic activities for men and women in your community?

Do men and women farm different crops?

Of those crops, which are sold at the market and which are consumed in the household?

Who are the main buyers of your crops? Do you sell to cooperatives, brokers, or individual customers in or outside your community?

Is your farm supported by, for example, the government or NGOs? Do women and men benefit from such support equally?

How do you get information about markets, prices, and demand?

#### Energy technology [companies may specify the product]

What motivated you to own the technology?

Who operates the technology? Why?

Do you find it difficult to use the technology?

Who pays for the technology?

Does your spouse have a mobile phone? Or do you share one mobile phone? Who uses it the most?

Who decides to buy or maintain technology?

Who maintains your technology and where do you get this service?

Who in your community attends meetings or training on technology, and why? Who speaks the most often in these meetings?

What benefits have you seen from the technology; for example, in terms of yields, income, workload, time, new business opportunities, and networking?

Would you recommend this technology to someone? Why?

#### **Decision-making**

On your farm, who decides to invest in, for example, land, technology, equipment, fertilizer, seeds, and pesticides? Who buys and owns these items? Why?

If married, do you and your spouse use your farm's land and equipment in the same way?

Who decides which crops to cultivate and sell? Why?

Who decides the price of your crops and where to sell them? Why?

Who decides how to spend your income from farming? Why?

If married, are there things that you or your spouse cannot do without consultation? Which are those and why?

#### Gender roles

What does your daily schedule look like? Which activities generate income for you, and which do not?

When farming, which tasks are done by men and which by women? For example, who prepares the land, plants and cultivates the crops, weeds, harvests, and sells the produce? Why?

#### Other demands and market gaps

What other services or products would improve your farming?

If married, what products or services do you think your spouse would like?

#### **Surveying female farmers (company customers)**

Basic Information				
Name				
Age				
Marital status and nu	umber of children			
Level of education				
Economic activities ( supplementary)	main and			
Place of residence				
What are your hous	ehold chores? Which	help you earn an inc	ome, and which do no	ot?
Paid				
Unpaid				
On which activities of per day, e.g.,	do you spend the mos	st time each day? Offe	er multiple choices and	d a space for hours
Productive work	Farming	Pumping water	Trading	Wage labor
Reproductive work	Fetching household water	Collecting wood	Buying food	Preparing food
WOLK	Childcare and nursing			
Social activities	Village meetings		Church meetings	
	h tasks are done by m the crops, weeds, ha		men? For example, wheroduce? Why?	no prepares the land,
Participation in agric	ulture			
How long have you	been farming?			
Less than 5 years		5 to 10 years		More than 10 years
For how long have y	ou been a customer o	of [insert name of co	mpany]?	
Less than 6 months		6 to 12 months		More than 12 months





What type of farming do you do?
Crops Animals Both
Why do you farm?
Subsistence Market Mixed
If you sell your produce on the market, who are your main buyers?
Cooperatives  Brokers/ Individuals in your community  Individuals outside your community
Given a choice, do you intend to keep farming?  Yes  No
From which channels do you get information on prices and demand?
Media Local government Fellow farmers
Other (explain):
Do men and women use the same sources of information?
Yes No (explain):
Do you receive farming support?
If yes, mention the services and providers (e.g., government, NGOs, companies, cooperatives)
What are your plans for your farm?
Household budget and decision-making
Do you own the land you farm on?
Yes I own the land I co-own the land
No My spouse owns the land A cooperative or group owns the land The land is privately owned
Do you need permission to use the land you farm on?
Yes (explain):
Who decides what, where, and for how much to sell?
Me Spouse/relative Other (please specify)

Who decides how to spend the income from farming	ng?
Me Spouse/relative	
Are there things that you or your spouse/relative cathose things, and why?	an do only after consulting each other? What are
Loans (access to finance and repayment)	
Have you taken a loan before?	Yes No
Do you take loans to finance investments for your f	arm?
Yes (explain):	No
If you have bought technology for your farm throug	h finance, who decided to take the loan?
Me and my spouse/relative	Spouse/relative
Do you have to consult your spouse or a relative w	hen taking a loan?
Yes No	
Who repays the loan?	
Me and my spouse/relative	Spouse/relative
Which source(s) of income do you use to pay the lo	oan?
In your opinion, what is the best loan repayment me	odel? Fixed instalment or customized?
Fixed instalment Customized (explain):	
Do you think women and men have equal access to	loans? If not, which difficulties do women face?
Did you experience difficulties with the loan repayme	ents? If yes, what could have made them easier to repay?

Operating and maintaining the technology
Who operates the technology on your farm (e.g., water pumps)?
Me Me and my spouse/relative Spouse/relative Farm help
Do you find the technology difficult to use? If yes, which is the most difficult technology to use?
Are there things which you are not allowed to do when it comes to technology because you are a woman?
Yes (explain):
Who maintains your technology and where do you get this service?
Who decides to buy and maintain the technology for your farm?
Me and my spouse/relative Spouse
Who in your community attends meetings or training on technology?
Me and my spouse/relative Spouse
What benefits have you seen from using the technology?
Increased yields Increased income
Less workload Saves time
New business opportunities  New networking opportunities
In your family, whom does the technology benefit the most?
All (including children)  Me  My spouse/relative
Access to information
How did you hear about [insert name of company]?
Why did you purchase our technology?
Where do you usually get information about new products and inputs for your farm?



Other demands and market gaps
What are your main sources of information for farming?
Are there agricultural extension officers in your community? If yes, have you been assisted by them?
Are there agricultural associations where you live? Are you a member?
If you are a member of an agricultural organization, what benefits does membership bring and are they useful for your farm?

#### **Surveying female farmers (non-customers)**

Basic Information				
Name				
Age				
Marital status and nu	umber of children			
Level of education				
Economic activities ( supplementary)	(main and			
Place of residence				
What are your hous	ehold chores? Which	help you earn an inco	ome, and which do no	ot?
Paid				
Unpaid				
On which activities of per day, e.g.,	do you spend the mos	t time each day? Offe	er multiple choices and	d a space for hours
Productive work	Farming	Pumping water	Trading	Wage labor
Reproductive work	Fetching household water	Collecting wood	Buying food	Preparing food
work	Childcare and nursing			
Social activities	Village meetings		Church meetings	
	h tasks are done by m the crops, weeds, har			no prepares the land,
Participation in agric	ulture			
How long have you	been farming?			
Less than 5 years		5 to 10 years		More than 10 years
For how long have y	ou been a customer c	of [insert name of cor	mpany]?	_
Less than 6 months		6 to 12 months		More than 12 months



What type of farming do you do?			
Crops	Animals		Both
Why do you farm?			
Subsistence	Market		Mixed
If you sell your produce on the market,	who are your main buye	ers?	
Cooperatives Brokers/intermediary	Individuals in your community	Individuals outside your community	
Would you like to expand your farm by, serving new markets?	for example, acquiring	more land and new	products or by
Yes (explain):			No
For which reasons would you like to exp	oand your farm?		
Subsistence	Market		Mixed
How do you water your crops, through	rain or irrigation?		
How would you assess the financial situathe village?	ation of your family com	pared to that of oth	er farming families in
How did the economic condition of your reasons for this change?	r family change during tl	ne last three years? \	What were the
Do you receive farming support?		Yes	No
If yes, mention the services and providers (e.g., govern	nment, NGOs, companies, coop	eratives)	
How much money did you invest in your	r farm and home last yea	ar? With what resou	urces (loan/cash)?

Household budget and	decision-making
Do you own the land	you farm on?
Yes	I own the land
No	My spouse owns the land A relative owns the land A cooperative or group owns the land The land is privately owned
Do you need permissi	ion to use the land you farm on?
Yes (explain):	No
Who decides what, w	here, and for how much to sell?
Me	Spouse/relative
Other (please specify)	
Who decides how to	spend the income from farming?
Me	Spouse/relative
Are there things that y	you or your spouse/relative can do only after consulting each other? What are?
Interest in [insert com	npany name]'s products and services
Do you have savings a	and what do you usually use them for?
Childcare and children's education	Household expenses  Business expenses  Personal expenses  Emergency (e.g., funerals and wedding)
Are you willing to inve	est in improving your agricultural production?
What kind of investme	ents do you intend to make in your farm in the next two years?
What would stop you	from buying technology for your farm?
Investment cost	Maintenance cost Long loan application Long payback time Lack of guidance
Do you have a mobile	phone? Yes No
Do MFIs provide finan	ncing for agriculture where you live? Have you contacted them?

#### **GENDER STRATEGY ROADMAP**

Do you have a bank account?			Yes		No	
If you do not have a bank account, what is the main reason for not having one?						
Too costly I do not have an ID	I do not need it					
Other (please specify)						
If you do not have a bank account, what w	ould help you open a	banl	< account?			
Do you use a bank account that belongs to	o somebody else? Wh	ose	account do you ı	ıse?		
Are you a member of a credit scheme? Ha	ave you ever taken a lo	oan f	rom it?			
Other demands and market gaps						
What are your main sources of information	on for farming?					
Are there agricultural extension officers in	n your community? If y	es, ł	nave you been ass	sisted	d by them?	
Are there agricultural associations where	you live? Are you a m	emb	er?			
If you are a member of an agricultural organiseful for your farm?	anization, what benefi	ts do	es membership t	oring	and are they	

#### **Tool 3: Interviewing partners**

Partners are organizations that have a relationship with your company and that can help your business reach women.

Partners may be agricultural organizations or suppliers, financial service providers, and women's savings groups.

When interviewing a partner, discuss the purpose of the study and explain how the data will be used. Adapt the questions proposed below to the interviewee.

Interviews should last 30 to 40 minutes; questions should be sent in advance to participants.

- Please tell us about your organization and your role.
- In which regions/districts is your organization active?
- How do you understand women's and men's different roles in the agriculture?
- How do you understand women's and men's farming, PUE, and finance needs?
- Describe the barriers women face in accessing PUE technology.
- Do you think women and men have the same opportunities to get information on PUE? If not, what are the reasons?
- Does your organization tailor its products to female and male customers?
- Does your organization use specific strategies to work with women?
- If your organization has strategies for working with women, can you describe what has worked, and why? What have you learned about serving women?
- Does your organization work with partners such as agricultural input suppliers and finance institutions?
- Who else should we be speaking to? Do you know other organizations that are successfully working with female farmers?

#### **Tool 4: Interviewing company staff**

Interviews with staff will consist of a semi-structured interview of about 30 to 45 minutes with five to seven staff members individually across different grades, job descriptions, and genders. Interviews should prioritize staff in management roles, HR, customer care, credit and financial services, and sales. These interviews are best conducted shortly after the company has collected market information through field work (see Section 4). Some of the questions below may need to be altered according to the findings and insights from the field work. The questions are not in any sequence as should be tailored to each interviewee.

#### **Business dynamics (questions for senior management)**

- Please tell us about the company and when you joined and in what role? How did you develop the company's sales and distribution approach?
- How have you considered differences between female and male customers in the company's business model?
- What would you say are the main reasons for a customer to adopt a solar product? Have you observed differences between men's and women's preferences for technology?
- How do the productive use technologies that you sell affect male and female farmers? Do these products benefit women and men differently in terms of costs saving and time saving, for example?
- What are your plans to improve the company's growth, training, access to finance, and customer service?

#### Marketing, sales, and distribution

- How do you interact with customers? For example, what marketing messages, techniques, and channels
  do you use to reach customers? Which have proven most effective? What do you do that is different
  from what other companies do?
- Do you think that male customers are more likely to purchase the product(s)?
- In your opinion, are male customers better clients? If yes, can you explain why? For example, are they better at repayment?
- When marketing and selling products, have you come up with different approaches to reach women versus men? If so, what results have you noticed?
- In your field visits, social media messages, and radio campaigns, do you see opportunities to change these outreach activities so that they reach female customers more effectively?
- Do you partner with other stakeholders such as women's groups and NGOs? If yes, please tell us which ones. Do you see further opportunities to reach female customers through partnerships?
- What barriers have you had to overcome to reach remote areas, build a customer base, and make products affordable to women and men?

#### Attention to gender differences and gender gaps

- Can you describe the different social and economic benefits for women and men of the products you sell? Do you collect data about these benefits and consumer feedback?
- Have staff been trained on the importance of considering gender in your business and on the gender inequalities in the regions where you do business?
- Do you think your staff would benefit from learning new methods for selling products to women?
- What other assistance do you need to market or sell your products differently to women and men?

#### **Access to finance**

- Can you walk me through the process of assessing a customer's suitability for a product or financial service?
- What are your challenges in offering financial services to female customers?
- We noted from our field data that female clients make up a small share of your customers (less than [X] percent). Could you share your insights on these data points?
- Do you see opportunities to offer other financial services? What changes could be made to your financing criteria, for example, the down payment amount, interest rate, and timeline for repayment?
- Which of the following areas could the company improve to reach female customers more effectively?
   Please elaborate on your choice.
  - a. Staff capacity.
  - b. Loan features (e.g., interest rates or payment duration).
  - c. Outreach and marketing.
  - d. Understanding customers' perceptions and norms.

#### **Employment**

- We have reviewed some HR data on employment of men and women at the company. Could you share your insights on women's participation in the company workforce and in leadership?
- Does the company promote a positive working environment for women? What are the challenges women face in different roles? What would make the work environment better for women?
- Are you aware of any policies that are designed to enhance women's employment, for example, ones that prevent sexual harassment or offer flexible working hours, safer transport, and upskilling opportunities?
- What could the organization do to encourage women to work here?
- What type of programs could the company introduce to remove the barriers to women's employment in your company?
- Are women perceived to have the right skill sets for employment in your company?
- Are you aware of recruitment efforts in the company to increase the number of female employees and to meet their needs?
- Where do your employees come from (what is their professional and demographic background)?
- Are there aspects of the company's culture or behaviors among co-workers that could be harmful to the company's ability to retain and advance women professionally?
- Have you experienced or observed bias in the workplace or in your previous roles in other organizations?
   Does this bias stem from the company's culture or its business practices? Please elaborate.
- Are you able to balance your personal life and family obligations to your satisfaction? Please elaborate.
- What are your aspirations in the company? What would help you to achieve them?

#### **Tool 5: The customer journey**

To identify shortcomings in your customer service cycle, use the customer journey map to map a female customer's experience with interacting with your company.

Phases	Awareness	Information gathering	Decision- making	Purchase	Product use	After-sales
Actions	<ul> <li>How does she first hear about the product or service?</li> </ul>	What does she do once she has gained information about the product or service?	<ul> <li>How does she decide to purchase the product or service?</li> <li>Who is involved in the purchase decision?</li> </ul>	<ul> <li>What are the actions she takes to purchase the product or service?</li> </ul>	<ul> <li>How does she use the product or service?</li> <li>Who else uses the product?</li> <li>What benefits does she experience?</li> </ul>	<ul> <li>What are the actions she takes after purchasing the product or service?</li> <li>What does she do if problems arise?</li> </ul>
Customer service channels	<ul> <li>Which channels—         e.g., radio or social         media—does your         company use to         reach the customer?</li> </ul>	<ul> <li>What does your company do to provide information on the product or service?</li> </ul>	<ul> <li>What does your company do to help the customer make purchase decisions?</li> </ul>	<ul> <li>How does your company interact with her during the purchase? Who else is involved?</li> </ul>	<ul> <li>How does your company interact with her while she uses the product?</li> </ul>	<ul> <li>How does your company provide after-sales service? Who is involved?</li> </ul>
Customer grievances	<ul> <li>Does she react negatively to your marketing?</li> <li>What is preventing her from hearing about your product or service?</li> </ul>	Does she experience problems in finding information about the product or service?	Can she gain honest information from your company to make an effective purchase decision?	<ul> <li>Is anything hindering the purchasing process?</li> </ul>	<ul> <li>Does she experience problems in using the product or service?</li> </ul>	<ul> <li>Can she get after- sales support from your company easily?</li> </ul>
Opportunities	List ways to solve the customer's problems here.	List ways to solve the customer's problems here.	List ways to solve the customer's problems here.	List ways to solve the customer's problems here.	List ways to solve the customer's problems here.	List ways to solve the customer's problems here.

#### **Tool 6: Prototyping solutions**

In a rapid-prototyping exercise, focus on eliciting a response from participants (your team, partners, and stakeholders) on gender equality policy and strategy. Use rapid prototyping to get a sense of how your company's gender interventions could work in the real world. During break-out groups, discuss the topics below and rapidly prototype your company's response in each area.

Figure 3: Rapid prototyping focus areas for the gender strategy.



#### Format of exercise

Time: 30 minutes

Preparation: Identify a group note-taker and presenter.

#### Guiding questions:

- What are the problems we are trying to solve? Which customers are we trying to reach?
- Which stage of the customer journey map should we focus on?
- What do the solutions look like?
- How would we pilot these solutions?
- Who would be involved in implementing these new approaches?
- How do we measure success?

After collecting and analyzing the group's recommendations, your team should revisit the guiding questions above and decide which of the solutions to refine and implement.

#### **Tool 7: Gender action plan template**

The company's gender action plan should describe your company's vision for gender inclusion and the objectives required to implement it over the short to long term. Be sure to add two additional columns: time frame and budget.

CATEGORY / OBJECTIVE	INITIATIVES	BASELINE	SUCCESS INDICATORS	RESPONSIBILITIES
Marketing and sales objective: Design marketing and sales strategies that appeal to a wider female customer base				
Develop and adopt a marketing and sales approach focused on women.	Launch an information campaign and expose women to technology by partnering with women's groups, district offices, and VICOBA associations (e.g., JUVIHMTU).	No targeted campaigns conducted to date	Campaigns reaching at least 100 women conducted and analyzed, with a report to management	Marketing Manager
	Train the sales team to engage groups of female farmers; to discuss product specifications; and to capture and report sex-disaggregated data on marketing and sales.	Sales team has not been trained to engage women in groups effectively	Trained at least 10 sales officers (one-third of the team); evaluated impact for a quarter	National Sales Manager
	Create content and messaging that speak to female farmers' preferences.	Marketing material is gender-blind	Content generated and in circulation; created a dedicated phone number on collateral to track impact	Marketing Manager

CATEGORY / OBJECTIVE	INITIATIVES	BASELINE	SUCCESS INDICATORS	RESPONSIBILITIES
Tackle cultural norms and engaging local mobilizers.	Adapt materials from research on couples' household decision-making, their financial resources, and women's economic empowerment: Introduce a farm-plan economics worksheet that the Sales Officer discusses with the husband and wife together.	No discussions on family economics as part of current sales approach	Household farm-plan economics worksheet developed; team trained on its use; use was tracked and analyzed	Co-CEO
	Reintroduce dual-signature on contracts, but do not set targets (as they can be gamed easily).	Tried in past but no information systematically collected	Tracked number of contracts with dual signature and noted in our CRM for future analysis	Co-CEO
	Add the spouse as a contact in the application form and in the CRM; evaluate notifying both with SMS about balance and payments.	Only one space for a contact and a non-specified back-up contact	Implemented in CRM	Customer Care Manager
Build a diverse salesforce.	Work with schools or programs that train women; hire within regions to reduce relocation challenges; get referrals from female staff.	21% of sales team are women	Target: 30%	National Sales Manager
Report quarterly on sex- disaggregated marketing and sales data.	Analyze leads generated by information disseminated through women's groups or influential female farmers (using Lead Source in SalesApp).	Limited sex- disaggregated marketing and sales data collected and analyzed	Compiled quarterly report; fields for gender-data incorporated into monthly reporting	Sales Analyst
	Track number of demonstrations delivered in partnership with women's groups and attendance numbers.	No metrics tracked	Designed a process for capturing info; added SalesApp functionality; trained the team to use SalesApp	Marketing Manager
	Track number and gender of people reached during each campaign.	No metrics tracked	Implemented process for updating Lead Source tracking for each campaign	Marketing Manager

CATEGORY / OBJECTIVE	INITIATIVES	BASELINE	SUCCESS INDICATORS	RESPONSIBILITIES
Consumer finance objective: Pilot new financing approaches and establish new partnerships to offer tailored solutions for women				
Pilot a new approach to down-payments and cashback rewards.	Explore lowering the down-payment amount or providing options for the down-payment amount to be paid (e.g., in two instalments) for female farmers.	No differentiated approach to consumer financing	Concluded analysis and write up recommendations on how to introduce gender-based financing	Co-CEO
	Evaluate cash-back rewards for on-time repayments, given the evidence that women seem to repay more consistently.	No incentives for timely repayments beyond 6 months	Evaluated program; if appropriate, design and document SOP; implement in platform; launch and market	Credit Officer
Bridge the savings gap: Develop a strategy and partner to bridge savings gaps.	Expand partnerships with savings groups (VICOBA, District Women Development Fund, local SACCOs), or formal financial institutions that attempt to cater to women.	No financing partnerships in place	Engaged at least 2 savings groups or financial institutions to evaluate feasibility and design the solution	Co-CEO
	Explore the option of offering a layaway approach by setting a price at which the customer can place an item on hold and pay the rest over time.	No savings or layaway options for consumers in place	Evaluated legal, operational, credit, and market implications of introducing layaway option	Credit Officer
Leverage group lending with a focus on managing off-taker risks.	Explore how savings and loans groups can be used to sell SWPs to women.	No engagement with group lenders	Engaged VSLAs to evaluate potential for group lending solutions; drafted programs to market via groups	Co-CEO
Collect sex-disaggregated information on access to finance.	Analyze credit approval and rejection process; assess consumer profiles according to employment and asset ownership; identify trends for female versus male customers and payment performance of female versus male customers.	Limited analysis of existing underwriting data	Reported quarterly on sex- disaggregated access to finance data	Co-CEO

CATEGORY / OBJECTIVE	INITIATIVES	BASELINE	SUCCESS INDICATORS	RESPONSIBILITIES	
After-sales service an	After-sales service and customer support objective: Collect sex-disaggregated data to understand the needs of women				
Expand customer care with services designed to support female customers' needs.	Optimize the after-sales process to provide female customers with confidence in technology use and maintenance by developing instructional materials and training sales staff.  Propose standardized questions asking consumers about their level of confidence with the technology.	Limited customer care approaches focused specifically on women	Identified at least 3 new protocols to support female customers to adopt technology  Female customers CES score reduced by 25%	Customer Care Manager	
Collect sex-disaggregated customer feedback.	Analyze sex-disaggregated feedback from customers on use and satisfaction.	Limited tracking and analysis of sex-disaggregated customer feedback	Reported quarterly on sex- disaggregated customer feedback	Customer Care Manager	
	Expand annual customer survey with broader sex-disaggregated analysis.		Integrated gender-specific analysis into existing annual survey	Customer Care Manager	
Research and develop	ement (R&D) objective: Focus on agricultural value	chains that involve many	women; identify new opportunities t	o serve these women	
Extend reach to agricultural sectors dominated by women.	Research the business opportunities of female-dominated agricultural sectors.	Some R&D	Researched commercial opportunities; developed protocols to increase gender-lens evaluation of R&D	Co-CEO	
Map value-chains and develop an asset ownership gradation model.	Map value chains with a large share of women and their demand; develop an asset ownership gradation model where appropriate.	Limited information on women's value-chains and demand	Mapped women's value-chains, technology needs, and market opportunities	Co-CEO	
Partnership objective: Increase the company's female customer base					
Create new partnerships to reach female consumers.	Formalize partnerships or sign memorandums of understanding.	No partnerships with organizations focused on women's economic empowerment	Partnered with 3 institutions focused on women's empowerment	Co-CEO	

CATEGORY / OBJECTIVE	INITIATIVES	BASELINE	SUCCESS INDICATORS	RESPONSIBILITIES	
HR and company cult	HR and company culture objective: Increase diversity in the workforce and raise awareness of gender equality within the company				
Make the Diversity & Inclusion Strategy company policy.	Disseminate policy internally and raise staff awareness of the policy during onboarding and staff training.	Low awareness of Diversity & Inclusion Strategy  Aspects of policy in HR Manual but not stand-alone or comprehensive	At least 80% of staff aware of Diversity & Inclusion Strategy  Policy enshrined and communicated	HR Director	
Build a strong culture of gender equality in the company through training.	Integrate gender considerations into ongoing staff training.	Existing training does not include gender equality training	All staff training includes gender equality	HR Director	
Adopt tools to pursue gender equality through HR.	Enhance gender equality by formulating clear guidelines for recruitment.	Limited external talent partnerships	Developed I to 2 new relationships with women's talent networks	HR Director	
	Reach out to female-focused professional networks to recruit talent.  Hold exit-interviews to understand the reasons for staff turnover; note if there are differences between male and female employee satisfaction.	No standard reporting	Quarterly report instituted	Co-CEO	
Increase the share of women on Simusolar's board.	Communicate to investors the company's desire to increase the number of women on the board; identify candidates for external board seats.	I/7 board members is a woman	One-third of board members are women	Co-CEO	

### **ADDITIONAL RESOURCES**

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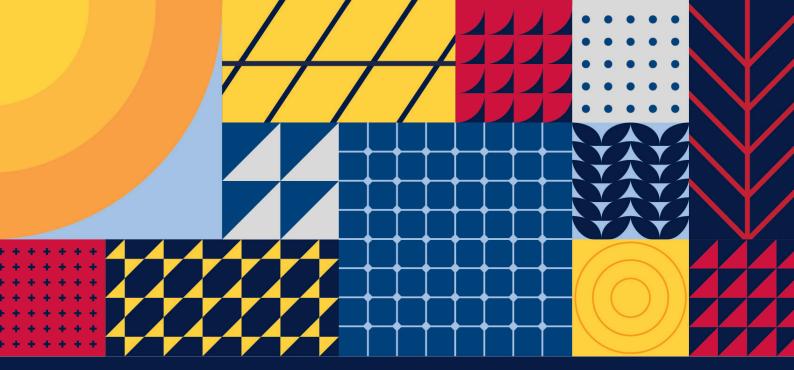
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USAID Powering Agriculture. 2017. Powering Agriculture Gender Resources. <a href="https://www.usaid.gov/energy/powering-agriculture/resources/gender">https://www.usaid.gov/energy/powering-agriculture/resources/gender</a>.



Power Africa's goal is to add at least 30,000 megawatts (MW) of cleaner and more reliable electricity generation capacity and 60 million new home and business connections by 2030.

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