

APPENDIX A: SURVEY QUESTIONNAIRE

Survey No.	
Survey Date	
Enumerator name	
Respondent name	

Location (village)	
Administrative unit	

Introduction to survey:

Introduce yourself.

Explain that you are doing a survey on energy needs and energy issues in Migori County and explain the purpose of the survey.

Make them feel comfortable.

Explain that all information will remain confidential. His or her name will NOT BE SHARED with anyone outside of the research team (SEI and Practical Action).

Clarify that it shouldn't take more than 1 hour and that there are some questions they won't need to answer.

100. Characteristics of house and household

HOUSE DATA (OBSERVED)

101. Type of house		102. Predominant material on the floor	
1. Brick house		1. Earth/sand	
2. Stone house		2. Cement	
3. Concrete-stone house		3. Tiles	
4. Mud		4. Wooden floor	
5. Wood		5. Others	_____ (specify)
6. Others	_____ (specify)		
103. The predominant material in the outer walls is:		104. The prominent material in the roof is:	
1 Brick or cement block		1. Concrete	
2 Adobe (sun-dried brick)		2. Wood	
3 Stone with cement		3. Tiles	
4 Stone with mud		4. Cement fibre	
5 Wood		5. Rudimentary mats	
6 Mat		6. Thatched	
7 Other material	_____ (specify)	7. Other material	_____ (specify)

HOUSE DATA (ASKED)

105. Number of rooms Excluding kitchen, bathroom, garage and storage.	
Number	

HOUSEHOLD DATA

106. The house that our household occupies is:			
Rented		→How much?	
Owned (built by themselves)			
Owned (bought)			
Owned (inherited)			
Other way?	_____ (specify)		

107. How do you dispose of:							
	Public network within house	Public network within community	Pit latrine (treated)	Rubbish pit	Burned	River, stream or canal	Other (Specify)
Human waste?							_____
Domestic waste?							_____
Animal waste?							_____

108. The water supply for household use comes from:			
	Y	N	Distance to water source (metres)
1. Piped water within house?			
2. Communal tap (from water company or community water project)			
3. Private borehole			
4. Communal well/borehole			
5. Rainwater harvesting			
6. Rivers, streams or canals?			
7. Other _____ (Specify)			

300. Sources of Energy (Only for the Head of Home or the Spouse)

301.	Are the following energy sources used in your home?	Yes	No
1	Electricity from interconnected grid or isolated system		
2	Kerosene		
3	Candle		
4	Dry cell batteries		
5	Car batteries		
6	LPG		
7	Solar PV home system		
8	Firewood		
9	Animal dung		
10	Crop residue		
11	Electric generator set		
12	Charcoal		
13	Coal		
14	Other (specify) _____		

USE and NON-USE OF ELECTRICITY

302.	Does your home have an electricity connection? (Take answer from above)	
Yes		Go to 304
No		Go to 303A

303A.	If your home has no electricity, please indicate whether the following statements are major, minor or not a reason to explain why the household is not connected to the grid?		
Code: Major Reason = 1 Minor Reason = 2 Not a Reason = 3			
	No reason	Minor reason	Major reason
1. Electricity is not available in my area			
2. Our household can't pay the connection fee			
3. Our household can't pay the cost of house wiring			
4. Our household can't afford the monthly payment			
5. Our household can't afford to buy electrical equipment			
6. We are satisfied with present energy source			
7. We do not see any application of electricity			
8. Other reason _____			

303B.	If your home has no electricity, would you like to have access to grid electricity?	
Yes		Go to 315
No		Go to 315

310A. Does your household use electricity for the following purposes?			310B. In general, how many hours per day for each activity?	
Use type	Yes	No	How many hours	Does not know
1. Lighting				
2. Cooking				
3. Electric appliances				
4. Family business				
5. Farm irrigation				
6. Other _____ (Specify)				

311A. In your opinion, your household electricity supply during the <u>dry season</u> is:		311B. During the <u>dry season</u> , how many times is the household's electricity services failed for more than 30 minutes?		311C. During the <u>dry season</u> , could you please estimate the amount of hours (in total) electricity service is not been available to your home due to electricity cuts or blackouts?		311D. During the <u>dry season</u> , how often do the household experience dimming of the light?	
Normal		Number of times		Enter hours with fraction		Often	
Irregular		Never				Rarely	
Do not know		Do not know		Do not know		Never	

312A. In your opinion, your household electricity supply during the <u>rainy season</u> is:		312B. During the <u>rainy season</u> , how many times is the household's electricity services failed for more than 30 minutes?		312C. During the <u>rainy season</u> , could you please estimate the amount of hours (in total) electricity service is not been available to your home due to electricity cuts or blackouts?		312D. During the <u>rainy season</u> , how often do the household experience dimming of the light?	
Normal		Number of times		Enter hours with fraction		Often	
Irregular		Never				Rarely	
Do not know		Do not know		Do not know		Never	

313. In case of power failure, what backup equipment does the household use, if any?			
	Yes	No	
a. Candles			
b. Kerosene wick lamp			
c. Gas lamp			
d. Dry cell batteries			
e. Car/Motorcycle battery			
f. Generator			
g. Other _____ (Specify)			

314A. Does your household use the following plug-in electric appliances?			314B. How many of each appliance does the household use?		314C. What is the sum of all hours for all appliances used during the last 24 hour period?	
			Code: Enter the number or “-7” for do not use.		Code: Enter hours of use with fraction, or “-7” for do not use.	
Appliance Type	Y	N			No. of hours	No. of minutes
1 Radio						
2 Sound equipment						
3 TV black and white						
4 TV colour						
5 Recording video/DVD						
6 Electric motors						
7 Refrigerator						
8 Microwave oven						
9 Electric stove						
10 Electric iron						
11 Fan						
12 Washing machine						
13 Domestic water pump						
14 Electrical sewing machine						
15 Electric drill						
16 Electric saw						
17 Electric pump for irrigation						
18 Others? _____ (Specify)						
19 Others? _____ (Specify)						
20 Others? _____ (Specify)						

USE OF KEROSENE

315. In the past month did your household use kerosene?		
Yes		
No		Go to 318

316A. How many litres of kerosene do you use per month?		316B. What is the price of each litre of kerosene?	
Litres		KES per litre	

317A. Does your household use kerosene for the following purposes?			317B. On average, how many hours for each activity?	
	Yes	No	Average hours	Does not know
1. To start firewood				
2. Lamp lighting				
3. Cooking				
4. Other (specify) _____				

USE OF CANDLES

318. In the past month, did your household use candles for lighting?		
Yes		
No		Go to 321

319A. How many candles did your household use in the past month?		319B. What is the price of each candle?	
No. of candles		KES per candle	

320A. Does your household use candles for following purposes?			320B. On average, how many hours for each activity?	
	Yes	No	Average hours	Does not know
1. Home use				
2. Family business use				
3. Other (specify) _____				

USE OF DRY CELL BATTERIES

321. In the past month did your household use dry cell batteries at home?		
Yes		
No		Go to 324

322A. Does your household use batteries of the following sizes?			322B. In a typical month, how many dry batteries of . . . did your household use in the past month?		322C. What was the price of each battery of size . . .?	
	Y	N	Code: Enter number of dry cell batteries.		Code: Enter price in KES of battery.	
1. Large (Size D and C)						
2. Small (Size AA and AAA)						

323A. What does your household use dry cell batteries for?			323B. How many hours per day does your household use the . . .?		
	Yes	No	Enter number of hours used per day		
			Hours	Minutes	
Radio					
Clock					
Flashlight					
Others? _____ (Specify)					

USE OF CAR BATTERIES

324. In the past month, did your household use a car battery to provide electricity at home?		
Yes		
No		Go to 330

325A. What is the cost of the car battery?		325B. What is the voltage of the battery?		325C. What is the amperage of the battery?	
KES		Volts		Amps	

326A. What is the cost per recharge?	326B. How many days until you need to recharge it?	326C. What is the cost of round trip transportation per recharge?
Amount in KES/ _____	Enter number of days each recharge last _____	Enter round-trip transportation cost in KES/. _____

327A. Does your household use any of the following types of lighting, which are energized by car batteries?			327B. If yes, how many light bulbs of this type does household use?	327C. What is the sum of all hours for all bulbs used during the last 24 hour period?		
	Yes	No	Does not know		Hours	Minutes
Incandescent light bulbs						
Fluorescent tubes						
Energy saving light bulbs						

328A. Does your household use a car battery for the following purposes?			328B. On average, how many hours for each activity?	
	Yes	No	Hours	Does not know
A. Lighting				
B. Cooking				
C. Electric appliances				
D. Other (specify) _____				

329A. Does the household use the following electric appliances, which are powered by electricity from car battery?			329B. How many of each appliance does the household use?	329C. What is the sum of all hours for all appliances used during the last 24 hour	
Appliance Type	Y	N		No. of hours	No. of minutes
1 Radio					
2 Sound equipment					
3 TV black and white					
4 TV colour					
5 Recording video/DVD					
6 Electric motors					
7 Refrigerator					
8 Microwave oven					
9 Electric stove					
10 Electric iron					
11 Fan					
12 Washing machine					
13 Domestic water pump					
14 Electrical sewing machine					
15 Electric drill					
16 Electric saw					
17 Electric pump for irrigation					
18 Others? _____ (Specify)					
19 Others? _____ (Specify)					
20 Others? _____ (Specify)					

USE OF LPG

330. In the past month did your household use LPG at home?		
Yes		
No		Go to 334

331A. What size of gas cylinder/tank does your household use at home?	331C. What is the price per cylinder or tank of LPG?	331E. How many days does one cylinder of LPG last?
	Y N	Enter price in KES per cylinder
1. 6 kg Cylinder		Enter number of days one cylinder
2. 13 Kg Cylinder		
3. Other specify size in Kg of cylinder _____		

332A. Does your household use LPG following purposes?	Yes	No	332B. On average, how many hours for each activity?	Hours	Does not know
1. Lamp lighting					
2. Cooking					
3. Appliances					
4. Other _____ (Specify)					

333A. Does the household use the following gas appliance?	333B. How many of each appliance does your household have?	333C. What is the sum of all hours for all . . . used during the last 24 hour period?	333D. What is the sum of all days for all . . . used during the last month?
Type of appliance	Y N	Enter number of appliances	Enter number of hours
			Hours Minutes
1. Gas lamp			
2. LPG stove			
3. LPG stove and oven			
4. Refrigerator			
5. Freezer			
6. Other _____ (Specify)			

USE OF SOLAR PV HOME SYSTEM

334. In the past month did your household use a solar PV home system (SHS) to provide electricity at home?		
Yes		
No		Go to 342

335. What was total cost paid for the solar PV home system (include all the components)?	
Total cost in KES	
Total cost in KES _____	

336. In which year did the household obtain the solar PV home system?	
Enter year the household obtained it (i.e. 1990)	_____

337. How much did your household spend on repairs or maintenance of the solar PV home system in the last 12 months?	
Total cost in KES _____	

338. What is the size in watt peak (Wp) of the solar PV system?	
Enter size of solar PV in Wp.	
Wp _____	

339A. Does your household use any of the following types of lighting, which are energized by solar PV system?				339B. If yes, how many light bulbs of this type does household use?		339C. What is the sum of all hours for all bulbs used during the last 24 hour period?	
	Yes	No	Does not know			Hours	Minutes
Incandescent light bulbs							
Fluorescent tubes							
Energy saving light bulbs							

340A. Does your household use PV system for the following purposes?			340B. On average, how many hours for each activity?	
	Yes	No	Hours	Does not know
1. Lighting				
2. Cooking				
3. Appliances				
4. Home business				
5. Other _____ (Specify)				

341A. Does the household use the following electric appliances, which are powered by electricity from solar PV system?				341B. How many of each appliance does your household have?		341C. What is the sum of all hours for all appliances used during the last 24 hour period?	
		Y	N	Enter the average number of appliances	Hours		Minutes
1	Radio						
2	Sound equipment						
3	TV black and white						
4	TV colour						
5	Video recorder						
6	DVD						
7	Others _____ (Specify)						
8	Others _____ (Specify)						

ELECTRIC GENERATOR SET

342. In the past month did your household use an electric generator set to provide electricity at home?		
Yes		
No		Go to 353

343. The electric generator set that you use is:		
Owned?		Go to 347
Hire purchase?		Go to 348
Rented?		→ What is the monthly rent? KES/. <input type="text"/> Go to 349A
Allowed to use by another home or company?		Go to 350
Not applicable		Go to 350

344. If own, what was total cost paid in cash for the electric generator set (include all the components)?	
Total cost in KES.	
KES/. <input type="text"/>	

345A. If hire purchased, how much is the monthly payment?	345B. How long until you have fully paid for it?
Enter the amount of monthly payment in KES	Enter the number of initial payments in KES.
KES/. <input type="text"/>	Time. <input type="text"/>

346A. If rented, how much is the monthly payment?	346B. If rented, what was the initial payment? (KES/.)
Enter the amount of monthly payment in KES.	Code: Enter the number of initial payments in KES.
KES/. <input type="text"/>	KES/. <input type="text"/>

347. In which year did the household obtain an electric generator set?	
Enter year the household obtained it (i.e. 1990)	
<input type="text"/>	

348A. What type of fuel does the electric generator set use?		348B. How many litres of fuel did your household use for gen-set last month?		348C. What is the price per unit?
	Yes	No	No. of litres	KES/. per unit
1	Diesel			
2	Petrol			



349. On an average, how much did your household spend per month on repairs and/or maintenance of electric generator set?	
Enter repair cost per month in KES.	
KES/. <input type="text"/>	

350A. Does your household use any of the following types of lighting, which are energized by an electric generator set?				350B. If yes, how many light bulbs of this type does the household use?	350C. What is the sum of all hours for all bulbs used during the last 24 hour period?	
	Yes	No	Does not know		Hours	Minutes
Incandescent light bulbs						
Fluorescent tubes						
Energy saving light bulbs						

351A. Does your household use electric generator set for the following purposes?			351B. On average, how many hours for each activity?	
	Yes	No	Hours	Does not know
1. Lamp lighting				
2. Cooking				
3. Appliances				
4. Home business				
5. Other _____ (Specify)				

352A. Does the household use the following electric appliances, which are powered by electricity from generator set?				352A. How many of each appliance does your household have?	352C. What is the sum of all hours for all appliances used during the last 24 hour period?	
		Y	N	Avg. no. of appliances	Hours	Minutes
1	Radio					
2	Sound equipment					
3	TV black and white					
4	TV colour					
5	Video recorder					
6	DVD					
7	Others (Specify) _____					
8	Others (Specify) _____					

USE OF FIREWOOD

353. In the past month did your household use firewood at home?		
Yes		
No		Go to 358

354. How does your household obtain firewood for domestic use?		
Purchase only		
Collected/gathered only		Go to 357A
Purchase and collect		
Other	_____	

THE FOLLOWING ARE QUESTIONS FOR PURCHASED FIREWOOD

355A. What is the cost per bundle of firewood		355B. On average, how many days will this bundle last?	355C. What was the one-way distance travelled (in meters) to make this purchase?	355D. How long did it take to travel one-way to make this purchase of firewood?		
*Don't include transportation cost		Enter number of days firewood lasted.	Enter distance in km travelled	Enter time in hours and minutes		
Total KES/.	Decimal			Hours	Mins	
				Adult Male		
				Adult Female		
				Child		

356A. How reliable is your firewood supply?		356B. Does the cost vary much			
Very reliable		No			
Fairly reliable		A little		Give reason →	
Unreliable		A lot		Give reason →	

THE FOLLOWING ARE QUESTIONS FOR COLLECTED FIREWOOD

357A. How many times did your household collect firewood last month?	357B. Where did you collect it from?	357C. On average, how many total days did the previous collected firewood last?	357D. What was the one-way distance travelled in the previous collection of firewood?
Number of collection		No. days firewood lasted.	Distance in meters travelled
	Farm		
	Forest		
	Other		

357E. In the last week, how much time (hours per week) was used in collecting firewood by the following members?		
Enter number of hours		Enter hours of use with fraction
Use Type	Hours	Minutes
Adult Male		
Adult Female		
Children		

USE OF CHARCOAL

358. In the past month did your household use charcoal at home?		
Yes		
No		Go to 361

359A. What is the cost per 2kg container of charcoal		359B. On average, how many days will this 2kg container last?	359C. What was the one-way distance travelled (in meters) to make this purchase?	359D. How long did it take to travel one-way to make this purchase of charcoal?		
*Don't include transportation cost		Enter number of days charcoal lasted.	Enter distance in km travelled	Enter time in hours and minutes		
Total KES/.	Decimal				Hours	Mins
				Adult Male		
				Adult Female		
				Child		

360A. How reliable is your charcoal supply?		360B. Does the cost vary much			
Very reliable		No			
Fairly reliable		A little		Give reason →	
Unreliable		A lot		Give reason →	

USE OF AGRICULTURE RESIDUE

361. In the past month did your household use agriculture residue at home?		
Yes		
No		Go to 363

362A. How many times did your household collect agriculture residue last month?	362B. How many total days did this collected agriculture residue last?	362C. What was the one-way distance travelled in the previous collection of agriculture residue?
Enter number of days agriculture residue lasts	Number of collection	Enter distance in meters travelled
_____	_____	_____

362D. In the last week, how much time (hours per week) was used in collecting crop residues by the following members?		
Enter number of hours		
Use Type	Hours	
Adult Male		
Adult Female		
Children		

ANIMAL DUNG

363. In the past month did your household use dung at home?		
Yes		
No		Go to 401A

364A. How many times did your household collect dung last month?	364B. How many total days did this collected dung last?	364C. What was the one-way distance travelled in the previous collection of dung?
Number of collection	No. of days dung lasted.	Enter distance in metres travelled
_____	_____	_____

364D. In the last week, how much time (hours per week) was used in collecting dung by the following members?		
Enter number of hours		
Use Type	Hours	
Adult Male		
Adult Female		
Children		

400 Cooking and health

USE OF COOKING STOVE and COOKING

We would like to ask about cooking fuels and all the stoves and fires that the household uses during a usual week.							
401A. What is the main stove that your household uses to cook all meals? Enter only <u>ONE</u>		401B. Where is this stove located?		401C. What type of fuel does your household usually use with this stove? Enter type of fuels that is used most often with this stove.		401D. Does your household use any other kind of fuel with this stove? Enter the second most often used fuel	
Open fire, e.g. three stones		Outdoors		Firewood		Firewood	
Traditional stove no chimney		Semi-enclosed		Crop residue or wood chips		Crop residue or wood chips	
Traditional stove with chimney		Separate kitchen		Dung cakes		Dung cakes	
Gas/kerosene stove		In living area		Charcoal		Charcoal	
Improved cookstove		Outdoors		Coal		Coal	
Electric stove		Other (specify)	___	Kerosene		Kerosene	
Other	_____ (Specify)			LPG		LPG	
				Electricity		Electricity	
				Other (specify)	____	Other (specify)	____

401E. Is there a window or vent in the cooking area?		401F. Who usually starts and tends this stove? Check the household member ID in Section 200 HH Member ID		401G. On average, how many meals do you cook a day using the stove? Check the household member ID in Section 200 HH Member ID		401H. Do you also use another stove? Enter <u>ALL</u> other stoves used	
None		Code Number		Number		Open fire, e.g. three stones	
One only		Traditional stove no chimney				Traditional stove no chimney	
Two or more		Traditional stove with chimney				Traditional stove with chimney	
		Gas/kerosene stove				Gas/kerosene stove	
		Improved cookstove				Improved cookstove	
		Electric stove		Electric stove		Other	
		Other	_____ (Specify)			Other	_____ (Specify)

401I. If you use an improved cookstove, what type?	401J. Where did you hear about improved cookstoves?	401K. Where did you buy your improved cookstove?
_____ (Specify)	_____ (Specify)	_____ (Specify)

401L. If you do not use an improved cookstove, why not?			
	Major reason	Minor reason	No reason
Too expensive			
Do not know where to buy			
Do not know what an improved cookstove is			
Do not like the look of them			
Food doesn't taste good			
Cultural beliefs			
Other (specify)			

HEALTH

402A. How often do you or a member of your household experience eye diseases with irritation?		
Never		
Occasionally		
Frequently		
All the time		

402B. How often do you or a member of your household experience an illness with a cough?		
Never		
Occasionally		
Frequently		
All the time		

402C. In the past, how many household members have reported illnesses with symptoms of eye irritations or coughs?		
	Number	
Men		
Women		
Children		

500. Mobile phone

501A. How many mobile phones do you have in your household		
Number		

501B. Where do you charge your mobile phone?			
		Distance from home (in metres)	
At home			
At a neighbour's home			
At a nearby town			

501C. What source of energy do you use to charge your mobile phone?			
Grid electricity			
Car battery			
Dry cell batteries			
Small solar panels (i.e. solar lantern)			
Solar PV home system			
Electric generator			
Other (specify) _____			

501D. How often do you charge your mobile phone?			
Daily			
Weekly			
Monthly			
Every two months			
Every six months			
Once a year			
Other (specify) _____			

600. Attitude

I am going to read to you a list of statements concerning energy use and other issues. I would like you to tell me if you agree or disagree with these statements and how strong your feelings are

Enumerator: Read the following statements one by one, and ask respondent whether he/she agrees or disagrees and probe for how strong his/her feeling is.

Code:				
Strongly disagree 1				
Disagree 2				
Agree 3				
Strongly agree 4				
Does not know 5		Disagree	Agree	Does not know
1	Electricity is very important for the children’s education.			
2	With electrical light the children can study at night			
3	At the moment, it is easy to read at night in the home.			
4	Reading with electrical light is better than with the light of candles or lamp.			
5	Our household is happy with the lighting system that we have in our home.			
6	To use kerosene or oil is harmful for the health.			
7	A car battery is a good source of electricity.			
8	A solar PV home system is a good source of electricity.			
9	Electricity helps with domestic tasks and care of the children.			
10	Today, the quality of life of my household is better than it was 10 years ago.			
11	The monthly electric bill is or would be a financial burden for my family.			
12	Monthly spending for non-electric energy sources is/was a financial burden for my family.			
13	I feel safe in my house in the evening.			
14	I feel safe outside my house in the evening.			
15	The electricity makes it easy to have information and the news.			
16	Watching TV provides my household with great entertainment.			
17	News and information from radio and television provide good information relevant for conducting business.			
18	News and information from radio and television provide useful information about agricultural activities.			
19	News and information from radio and television provide good knowledge on family health issues.			

700. Participation

HOUSEHOLD PARTICIPATION

701A. Within the household, do you discuss energy issues and how to plan for energy		701B. If yes, what issues do you discuss?	701C. How often do such discussions take place?			
Yes		_____ (Specify)	Daily		6-monthly	
No		_____ (Specify)	Weekly		Yearly	
		_____ (Specify)	Monthly		Rarely	

701D. If no, would you like have such discussions?		701E. How often would you like to have such discussions?		701F. What issues would you like to discuss?
Yes		Daily		_____ (Specify)
No		Weekly		_____ (Specify)
		Monthly		_____ (Specify)
		6-monthly		
		Yearly		

701G. How do you get information on energy services and products?	
Text message	
Radio	
TV	
Barazas	
Newspaper	
Notices	
Chamas	
Word of mouth	
Other	_____ (Specify)

COMMUNITY PARTICIPATION

702A. Beyond the household, are there any other forums for you to discuss energy issues?		
Yes		
No		Go to 503

702B. How do you hear about them?	
Text message	
Radio	
TV	
Barazas	
Newspaper	
Notices	
Chamas	
Word of mouth	
Other	_____ (Specify)

702C. How often do such forums take place?		702D. How often do you participate?		702E. Who organizes the forums?
Monthly		All the time		_____ (Specify)
Every 6 months		Regularly		
Yearly		A few times		
Once or twice only		Once		

702F. How were you involved in the forums?	702G. What were the issues discussed?	702H. How did you benefit?
_____ (Specify)	_____ (Specify)	_____ (Specify)
_____ (Specify)	_____ (Specify)	_____ (Specify)
_____ (Specify)	_____ (Specify)	_____ (Specify)

703. In the future, would you like to be involved in forums to discuss energy issues?		
Yes		
No		Go to 506

704. How would you like to hear about them?	
Text message	
Radio	
TV	
Barazas	
Newspaper	
Notices	
Chamas	
Word of mouth	
Other	_____ (Specify)

706. Through which channels/forums would you like to discuss your views on energy?		
Individual/direct communication		
Through influential community members (i.e. village elder)		
Through public hearings		
Through other community meetings		
Other	_____ (Specify)	
Other	_____ (Specify)	
Other	_____ (Specify)	

707. What issues would you raise?			
		Most important	Second most important
1.			
2.			
3.			
4.			
5.			

708. What new ways can you think of to having your voice heard?	
1.	_____ (Specify)
2.	_____ (Specify)
3.	_____ (Specify)

800. Getting in contact

801A. Would it be ok for us to contact you again, in case we require further information?		
Yes	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>

801B. Could we take your mobile phone number?	
Phone number:	_____

- End of survey -

Please receive a token of thanks of 250 KES for your time

Signature of
respondent

Date

APPENDIX B: POTENTIAL AVENUES FOR CITIZEN PARTICIPATION IN ENERGY PLANNING

Group	Activities	Examples	Previous experiences
Women Group	<p>Educating women and children</p> <p>Raising awareness</p> <p>Resource mobilization to promote energy technologies</p> <p>Conservation activities</p>	<p>Organizing education meetings; organize energy seminars;</p> <p>Communicating through word of mouth, phone, socialize with different people, announce in church</p> <p>Mobilizing money through the Constituency Development Fund, non-governmental organizations, merry-go- rounds</p> <p>Providing tree seedlings for planting per homestead, and planting water friendly trees along the river banks</p>	<p>Supporting each other in schools to buy solar</p> <p>Migori river and Nyasare forest reforestation project</p> <p>Proposal writing for accessing the Constituency Development Fund to support school fees and infrastructure development</p> <p>K-Rep Bank and Kenya Women Finance Trust have used women to communicate to others about their products.</p> <p>Agriculture project to eliminate weed was done.</p>
Youth Group	<p>Sharing ideas through youth leaders and youth forums</p> <p>Promoting and encouraging social audits</p> <p>Involving youth in implementation of projects (providing manpower)</p> <p>Researching and writing proposals for community development projects</p> <p>Afforestation initiatives</p>	<p>Information sharing with community through focus group discussions and demonstrations</p> <p>Advocating for implementation, transparency and accountability</p> <p>Forming investment groups and generate project ideas, followed by proposal development</p> <p>Voluntary work</p> <p>Mobilizing youths so that they can plant trees</p>	<p>Construction of Mumbo bridge in Suna Central was stopped by youth</p> <p>Magina forest tree plantation involved youth participations.</p> <p>Posho mill project in Suna West, where they secured loan from the bank through proposal development</p> <p>Construction of classrooms and latrines by World Vision was success due to community involvement</p> <p>Construction of schools was successful due to community involvement (Kehancha primary)</p> <p>Came up with traditional fridge and oven for storage of vegetables during dry season</p>

Group	Activities	Examples	Previous experiences
Community leaders	<p>Educating and mobilizing the community (for planning, implementation, information sharing)</p> <p>Monitoring and participating in energy activities to ensure implementation</p> <p>Participating in development of County Integrated Development Plan</p> <p>Influencing decisions through involvement of various groups, such as youth, church, women and opinion leaders</p> <p>Solicit for different training by relevant authorities</p> <p>Making donations, providing security and a volunteer workforce</p> <p>Collaboration and networking with other communities to compare progress of the project</p>	<p>House to house visits, chief meetings, churches, burials, harambees, PTA and BOG meetings at schools.</p> <p>Participating in the ward development fund committee</p> <p>Assessing people's needs</p> <p>Forming advocacy groups to press for lower pricing of energy products and services</p> <p>Getting involved in formation of committees and convincing people to accept and embrace the project</p> <p>Be role models by embracing new technologies and services such as M-Kopa</p> <p>Through the monthly contributions by the community members</p>	<p>Water project in GodKwer</p> <p>New roads opened at Oruba Ragana</p> <p>Aromba Heath centre built</p> <p>Construction of ward offices</p> <p>Stage complaints in Kuria East to get electricity and it was brought to the community</p> <p>Demonstrated for upgrading of poor hospitals as a result, mortuary and the x-ray machines were supplied</p> <p>Bukoba Dam project was proposed by the community, constructed by Constituency Development Fund and now benefiting the community</p>
Administration	<p>Civic education on alternatives sources of energy</p> <p>Acting as agents of regulation, enforcement and advocacy</p> <p>Generating data about sources and uses of energy</p> <p>Mobilization the community (for planning and implementation)</p> <p>Monitoring the implementation and participating in the implementation</p>	<p>Planning at ward level through ward forums</p> <p>Civic education, mobilization, training, coordination, facilitation</p> <p>Data generation</p> <p>Monitoring and evaluation</p>	<p>Beach management units (Nyatike and Muhuru)</p> <p>North Kadem Ward Development Fund Committee's bursary fund for secondary schools and colleges</p> <p>Kaler Ward Self-Help Group on food security</p>