EnergyIssuesPriorities_CWP-UGA_NatlSurvey_January_2023

A.1 Enumerator name? _____ Can be initials.

Enumerators -- read this introduction to the respondents:

We are working with the government of Uganda to understand how to improve rural livelihoods through investments in energy for productive use and related infrastructure and services at the parish level. MEMD is the main partner, and MOLG, MAAIF, MWE and other government ministries, departments and agencies are also familiar with our work.

We are asking local leaders, government workers, local farmers and other knowledgeable people about existing and potential productive energy uses in this area. We will ask you to assess several areas for investment in terms of the potential benefit to local people and how to prioritize related interventions (investments, programs, services), given limited resources and the capital-intensive nature of infrastructure investments.

Note: There are areas like health, drinking water, sanitation, and education that are clearly very important but do not ask about them here since we are trying to focus on productive uses of energy for income generation.

For enumerators: Was this parish (boundary and name) included in the map data provided to you?

Answer N if it is a new/different parish from what we have in our map data. Parish boundaries have changed since this map data was created.

(Yes/No/Don't Know)

A2. Please confirm that the respondent has familiarity with the entire parish and should respond considering the whole parish. This is particularly important for large parishes. Each parish should be described using a separate survey form. (Yes/No)

A3. Give the full name of the parish that this interview will cover.

A4. If the area covered is NOT a full parish, please describe the area that will be discussed.

For ex., a parish may include portions of a nature reserve.

A5. Record the GPS coordinates at the PRIMARY interview location. If the interview took place in more than one location, choose the MAIN location. latitude $(x.y^{\circ})$ longitude $(x.y^{\circ})$ accuracy (m) longitude (m)

A8. Name of PRIMARY respondent

If the interview takes place in/near a group, try to obtain clear responses from one person (to avoid many different answers or opinions)

A9. Title or leadership role for the PRIMARY respondent ______ Ex. Water Ministry officer

A10. If the interview involved more than one respondent, describe the other respondents.

B0. Does electric utility wire pass through this parish anywhere at all?

(Yes/No/Don't Know)

B1. Estimate the distance from the parish covered in this interview to any overhead utility wire.

This can be from a main national grid, rural grid or mini-grid run by a utility.

- [] Close to this parish (5km or less)
- [] Medium distance (5-25 km)
- [] Far away (>25 km from the parish boundary)
- [] Don't know

B2. Select the type(s) of utility providing the power

[] BECS (Bundibugyo Energy Cooperative Society)

[] KIL (Kilembe Investments Ltd)

[] KRECS (Kyegegwa Rural Electricity Cooperative Society)

- [] PACMECS (Pader-Abim Community Multipurpose Eletric Society)
- [] UEDCL (Uganda Electricity Distribution Company Limited)
- [] UMEME (main national utility)
- [] WENRECo (West Nile Rural Electrification Company)
- [] A rural electric grid utility not otherwise listed
- [] A local mini-grid run by a utility not otherwise listed
- [] Another type of electric utility
- [] Don't know

B.2a Name / describe the other utility

C0a. Is irrigation of any kind present in this parish (manual or mechanized)?

(Yes/No/Don't Know)

C0b. What is/are the most widely used power source(s) for lifting water by households (not large scale farms)

- [] Manual: Buckets from well, treadle pump, etc.
- [] Gravity flow
- [] Fuel (diesel, gasoline)

[] Solar

- [] Connection to grid power (Umeme)
- [] Connection to a mini-grid
- [] Animal power
- [] Other power source

C0c. Are there any clusters of irrigators in the parish? Cluster: 3 or more irrigating farmers within a short walk of each other (<5 min)

C0d. Describe the area(s) where the clusters occur

C1. Which of the following machines related to agriculture or livestock exist in this parish?

Select ALL that are found in this parish. These can be manual or mechanized (any source of power).

[] water pumping for agriculture (irrigation, crops)

[] water pumping for livestock / animals

[] cold storage for animal products (meat, poultry, dairy, etc.)

- [] agro-processing: grinding/milling into flour/meal/powder
- [] agro-processing: threshing/dehusking/hulling
- [] agro-processing: grating /peeling/chipping
- [] agro-processing: grinding/pressing into paste/oil extraction

[] agro-processing: drying/roasting

[] agro-processing: sorting/washing

[] feed preparation (incl. mixing/heating/pelleting)

- [] other productive use of energy
- [] don't know
- [] none

C1a. Describe this other machine of energy _

Must be found in this parish. These can be manual or mechanized (any source of power).

C2. Which three types of machines for agriculture/livestock have the highest potential to improve livelihoods in this parish? (Maximum of 3)

These can be already occurring in the parish or not. These can be manual or mechanized (any source of power).

[] water pumping for agriculture (irrigation, crops)

[] water pumping for livestock / animals

[] cold storage for animal products (meat, poultry, dairy, etc.)

[] agro-processing: grinding/milling into flour/meal/powder

[] agro-processing: threshing/dehusking/hulling

[] agro-processing: grating /peeling/chipping

[] agro-processing: grinding/pressing into paste/oil extraction

[] agro-processing: drying/roasting

[] agro-processing: sorting/washing

[] feed preparation (incl. mixing/heating/pelleting)

[] other productive use of energy

[] don't know

[] none

C1a. Describe this other productive use of energy

This can be already occurring in the parish or not. This can be manual or mechanized (any source of power).

We're going to read a list of projects that could be done in your area. Please listen to them all and rate how important each would be to help farmers in this parish earn more income.

D.1 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increasing Access to Agro-Processing

1 = Low 2 = Med / Moderate 3 = High

D.2 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Developing water source for irrigation

1 = Low 2 = Med / Moderate 3 = High

D.3 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Helping farmers get access to water pumps for irrigation

1 = Low 2 = Med / Moderate 3 = High

D.4 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Helping farmers get access to pipes, canals or drip systems for irrigation

1 = Low 2 = Med / Moderate 3 = High

D.5 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Drinking water supplies for livestock

1 = Low 2 = Med / Moderate 3 = High

D.6 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Cold storage for animal products (meat, poultry, eggs, milk, fish)

1 = Low 2 = Med / Moderate 3 = High

D.7 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Fencing / protection for animals or crops

1 = Low 2 = Med / Moderate 3 = High

D.8 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Improve roads or transport network or transport services in the area.

1 = Low 2 = Med / Moderate 3 = High

D.9 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase access to electricity for homes and businesses (Whether from grid or mini-grid or stand-alone solar)

1 = Low 2 = Med / Moderate 3 = High

D.10 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Reduce outages or blackouts in electricity/improve reliability of service

1 = Low 2 = Med / Moderate 3 = High

D.11a Is there another (not listed) income generating enabler related to water, energy and agriculture? (Yes/No)

D.11b Describe the other income generating enabler related to water, energy and agriculture

D.11c Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Other income generating enabler related to water, energy and agriculture

1 = Low 2 = Med / Moderate 3 = High

Please rank your top three of the full list of projects we've just discussed.

E.1 What is the MOST important project from the list that would help improve livelihoods in this parish?

Select one from list.

[] Increasing access to Agro-Processing

[] Developing water sources for irrigation

[] Helping farmers get access to water pumps for irrigation

[] Helping farmers get access to pipes or canals for irrigation

[] Developing water supplies for livestock

[] Cold storage for animal products (meat, poultry, eggs, milk, fish)

[] Fencing/protection for animals or crops

- [] Improve roads or transport network or transport services in the area
- [] Increase access to electricity for homes and businesses
- [] Reduce outages or blackouts in electricity

[] Other income generating enabler related to water, energy and agriculture

E.2 What is the SECOND most important project from the list that would help improve livelihoods in this parish?

Select one from list.

- [] Increasing access to Agro-Processing
- [] Developing water sources for irrigation
- [] Helping farmers get access to water pumps for irrigation

[] Helping farmers get access to pipes or canals for irrigation

[] Developing water supplies for livestock

[] Cold storage for animal products (meat, poultry, eggs, milk, fish)

[] Fencing/protection for animals or crops

- [] Improve roads or transport network or transport services in the area
- [] Increase access to electricity for homes and businesses
- [] Reduce outages or blackouts in electricity
- [] Other income generating enabler related to water, energy and agriculture

E.2a Describe the other factor.

E.3 What is the THIRD most important project from the list that would help improve livelihoods in this parish?

Select one from list.

[] Increasing access to Agro-Processing

[] Developing water sources for irrigation

[] Helping farmers get access to water pumps for irrigation

[] Helping farmers get access to pipes or canals for irrigation

[] Developing water supplies for livestock

[] Cold storage for animal products (meat, poultry, eggs, milk, fish)

[] Fencing/protection for animals or crops

[] Improve roads or transport network or transport services in the area

[] Increase access to electricity for homes and businesses

[] Reduce outages or blackouts in electricity

[] Other income generating enabler related to water, energy and agriculture

E.3a Describe the other factor.

E.4 Please add any brief notes that you think are important related to the investment/intervention that you listed 1st, 2nd or 3rd. This can include specific technologies, or implementation details. For example: "Subsidy for electric mill(s)"

We're going to read another list of projects that could be done in your area. Please listen to them all and rate how important each would be to help you earn more income.

F.1 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Reduce impact of price fluctuations for crops / livestock / animal products

1 = Low 2 = Med / Moderate 3 = High

F.2 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Helping farmers access land titles

1 = Low

2 = Med / Moderate 3 = High

F.3 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Improve markets for livestock

1 = Low 2 = Med / Moderate 3 = High

F.4 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase access to loans or banking services, including mobile banking

1 = Low 2 = Med / Moderate 3 = High

F.5 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Lower price of electricity

1 = Low 2 = Med / Moderate 3 = High

F.6 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Lower price of fuel

1 = Low 2 = Med / Moderate 3 = High

F.7 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase training on crops

1 = Low 2 = Med / Moderate 3 = High

F.8 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase training on irrigation

1 = Low 2 = Med / Moderate 3 = High **F.9** Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase training on livestock

1 = Low 2 = Med / Moderate 3 = High

F.10 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase access to farm inputs

1 = Low 2 = Med / Moderate 3 = High

F.11 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Increase access to farm labor

1 = Low 2 = Med / Moderate 3 = High

F.12 Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Improve network in the area

1 = Low 2 = Med / Moderate 3 = High

F.13a Is there another (not listed) GENERAL income generating enabler? (Yes/No)

F.13b Describe this other GENERAL income generating enabler

F.13c Rate (1-3) the following factor in terms of benefits to livelihoods in this parish: Other general income generating enabler

1 = Low 2 = Med / Moderate 3 = High

Please rank your top three of the second list of projects we've just discussed

G.1 What is the MOST important thing from the second list of projects to help improve livelihoods in this parish?

Select one from list.

[] Reduce impact of price fluctuations for crops / livestock / animal products

- [] Helping farmers access land titles
- [] Improve markets for livestock
- [] Increase access to loans or banking services
- [] Lower price of electricity
- [] Lower price of fuel
- [] Increase training on crops
- [] Increase training on irrigation
- [] Increase training on livestock
- [] Increase access to farm inputs
- [] Increase access to farm labor
- [] Improve network in area
- [] Other general income generating enabler

G.1a Describe the other factor.

G.2 What is the SECOND most important thing from the second list of projects to help improve livelihoods in this parish?

Select one from list.

- [] Reduce impact of price fluctuations for crops / livestock / animal products
- [] Helping farmers access land titles
- [] Improve markets for livestock
- [] Increase access to loans or banking services
- [] Lower price of electricity
- [] Lower price of fuel
- [] Increase training on crops
- [] Increase training on irrigation
- [] Increase training on livestock
- [] Increase access to farm inputs
- [] Increase access to farm labor
- [] Improve network in area
- [] Other general income generating enabler

G.2a Describe the other factor.

G.3 What is the THIRD most important thing from the second list of projects to help improve livelihoods in this parish?

Select one from list.

- [] Reduce impact of price fluctuations for crops / livestock / animal products
- [] Helping farmers access land titles
- [] Improve markets for livestock

[] Increase access to loans or banking services

[] Lower price of electricity

[] Lower price of fuel

[] Increase training on crops

- [] Increase training on irrigation
- [] Increase training on livestock
- [] Increase access to farm inputs
- [] Increase access to farm labor
- [] Improve network in area
- [] Other general income generating enabler

G.3a Describe the other factor.

G.4 Please add any brief notes that you think are important related to the investment/intervention that you listed 1st, 2nd or 3rd. This can include specific technologies, or implementation details. For example: "Subsidy for electric mill(s)"

H.1 If there are any additional factors that you believe are critical to improve livelihoods in this parish, but they have not been covered at all in the survey so far, please briefly share them here:

(Factors = investments, programs, services, etc.) (Note: Health, drinking water, sanitation and education are very important but we are trying to understand the impact of infrastructure and services, so these should not be included here.)

If there are any final notes you (the enumerator) wish to share about the survey, please add them here.