

LOT 3 - EU PESCA PROJECT

Good Morning/Afternoon/Evening Sir/Madam, I am. , from ECRAM. I am part of a team interviewing People for the study on '**UPGRADING THE FEED OUTPUT, QUALITY AND RELIABILITY**' under the PESCA project in Uganda. The project is funded by the European Union (EU). The information generated will guide the development of an appropriate fish feed value chain in the country. You have been randomly selected to participate in this survey. If you agree, I will ask you questions about our enterprise/farm. You have the choice to participate or not to participate in this survey. You can stop at anytime, or skip any questions you do not want to answer. By answering the questions, you have agreed to take part in this study. I thank you in advance for your participation. Please feel free to ask any questions about the interview or study. The information provided will be confidential, meaning that no one except me will know it was you who gave these answers and the information you give will only be used for the purposes of this research or study. These questions usually take about 20 minutes.

Are you interested in participating in this survey?

Yes

No

Consent form

The respondent will be provided with a consent form. The enumerator will take a photo of the consent form.

Click here to upload file. (< 10MB)

Date of interview

yyyy-mm-dd

Name of Interviewer

Time of interview

Time at start of interview

hh:mm

LOCATION

Region

Central

Eastern

Western

Northern

North Western

SouthWestern

DISTRICTS IN THE CENTRAL REGION

- Masaka
- Mpigi
- Mukono
- Luweero
- Lwengo
- Kalangala
- Wakiso

Sub County/Town Council/Municipality in Kalangala District

- Bubeke Sub County
- Mazinga Sub County
- Kalangala Town Council
- Bujumba Sub County
- Mugoye Sub County
- Bufumira Sub County
- Kyamuswa Sub County

Sub County/Town Council/Municipality in Lwengo District

- Kkingo Sub County
- Lwengo Town Council
- Kisekka Sub County
- Kyazanga Town Council
- Lwengo Sub County
- Malongo Sub County
- Ndagwe Sub County
- Kyazanga Sub County

Sub County/Town Council/Municipality in Masaka District

- Buwunga SubCounty
- Bukakata SubCounty
- Kabonera SubCounty
- Kyannamukaaka Sub County
- Kyesiiga Sub County
- Mukungwe Sub County
- Masaka Municipality

Sub County/Town Council/Municipality in Luwero District

- Bamunanika Sub County
- Katikamu Sub County
- Kalagala Sub County
- Kamira Sub County
- Kikyusa Sub County
- Zirombwe Sub county
- Bombo Town Council
- Butuntumula Sub County
- Luweero Town Council
- Luweero Sub County
- Makulubita Sub County
- Nyimbwa Sub County
- Wobulenzi Town Council

Sub County/Town Council/Municipality in Mukono District

- Kyampisi Sub County
- Nama Sub County
- Mukono Municipality
- Koome Sub County
- Mpatta Sub County
- Mpunge Sub County
- Nakisunga SubCounty
- Ntenjeru Sub County
- Kasawo SubCounty
- Kimenyedde SubCounty
- Nabbaale Sub County
- Nagojje Sub County
- Ntunda SubCounty
- Seeta-Namuganga Sub County

Sub County/Town Council/Municipality in Wakiso District

- Kira Municipality
- Makindye Municipality
- Entebbe Municipality
- Nansana Municipality
- Katabi Town Council
- Kajjansi Town Council
- Kasanje Town Council
- Bussi Sub County
- Kyengeru Town Council
- Wakiso Sub County
- Wakiso Town Council
- Mende Sub County
- Kakiri Town Council
- Kakiri Sub County
- Namayumba Town Council
- Namayumba Sub County
- Masulita Town Council
- Masulita Sub County
- Kasangati Town Council

Sub County/Town Council/Municipality in Mpigi District

- Buwama Town Council
- Mpigi Town Council
- Kammengo Sub County
- Kiringente Sub County
- Kituntu Sub County
- Muduuma Sub County
- Nkozi Sub County

DISTRICTS IN THE EASTERN REGION

- Soroti District
- Budaka District
- Iganga District
- Jinja District

Sub County/Town Council/Municipality in Budaka District

- Naboia SubCounty
- Budaka TownCouncil
- Budaka Sub County
- Kachomo SubCounty
- Kaderuna Subcounty
- Kakule SubCounty
- Lyama Sub County
- Nansanga SubCounty
- Iki-Iki Sub County
- Kameruka SubCounty
- Kamonkoli SubCounty
- Katiira Sub County
- Mugiti SubCounty

Sub County/Town Council/Municipality in Iganga District

- Nambale Sub County
- Nabitende Sub County
- Namungalwe Sub County
- Nawandala Sub County
- Kidaago Sub County
- Bulamogi Sub County
- Nakalama Sub County
- Nakigo Sub County
- Nawanyingi Sub County
- Iganga Municipality

Sub County/Town Council/Municipality in Soroti District

- Arapai SubCounty
- Soroti Municipality
- Asuret SubCounty
- Gweri SubCounty
- Kamuda Sub County
- Katine Sub County
- Soroti Sub county
- Tubur Sub County

Sub County/ Town Council/Municipality in Jinja District

- Jinja Municipality
- KakiraTown Council
- Bugembe Town Council
- Buwenge Town Council
- Butagaya Sub County
- Buyengo Sub County
- Budondo Sub County
- Buwenge SubCounty
- Mafubira Sub County
- Busedde SubCounty

DISTRICTS IN THE WESTERN REGION

- Hoima District
- Kasese District

Sub County/Town Council/Municipality in Hoima District

- Kyabigambire Sub County
- Buseruka Sub County
- Kigorobyia Sub County
- Kigorobyia Town Council
- Kitoba Sub County
- Bugambe SubCounty
- Buhimba Sub County
- Kabwoya SubCounty
- Kiziranfumbi Sub County
- Kyangwali Sub County
- Hoima Municipality

Sub County/Town Council/Municipality in Kasese District

- Kisinga Sub County
- Bwera Sub County
- Isango Sub County
- Karambi Sub County
- Kitholhu Sub County
- Kyarumba SubCounty
- Kyondo Sub County
- Mahango SubCounty
- Mpondwe/Lhubiriha Town Council
- Mukunyu SubCounty
- Nyakatonzi Sub County
- Nyakiyumbu Sub County
- Bugoye Sub County
- Buhuhira Sub County
- Bwesumbu Sub County
- Hima Town Council
- Karusandara SubCounty
- Katwe-Kabatoro TownCouncil
- Kilembe Sub County
- Kitwamba Sub County
- Kyabarungira SubCounty
- Lake Katwe Sub County
- Maliba Sub County
- Muhokya Sub County
- Rukoki Sub County
- Kasese Municipality

DICTRICTS IN THE NORTHERN REGION

- Apac District
- Amuru District
- Oyam District
- Omoro District
- Lira District

Sub County/Town Council/Municipality in Apac District

- Aduku Sub County
- Akokoro SubCounty
- Abongomola Sub County
- Aduku TownCouncil
- Chawete Sub County
- Inomo Sub County
- Nambeiso Sub County
- Apac Sub County
- Apac Town Council
- Chegere Sub County
- Ibuje Sub County

Sub County/Town Council/Municipality in Amuru District

- Amuru Town Council
- Pabbo Sub County
- Atiak Sub County
- Lamogi Sub County
- Amuru Sub County

Sub County/Town Council/Municipality in Oyam District

- Loro Sub County
- Abok Sub County
- Aber Sub County
- Acaba Sub County
- Aleka Sub County
- Iceme Sub County
- Kamdini Sub County
- Minakulu Sub County
- Myene Sub County
- Ngai Sub County
- Otwal Sub County
- Oyam Town Council

Sub County/Town Council/Municipality in Omoro District

- Lakwana Sub County
- Bobi Sub County
- Lalogi Sub County
- Odek Sub County
- Koro Sub County
- Ongako Sub County

Sub County/Town Council/Municipality in Lira District

- Aromo Sub County
- Adekokwok Sub County
- Lira Municipality
- Ayami Sub County
- Ngetta SubCounty
- Lira
- Iwal
- Agali
- Agweng
- Wiodyek
- Ogur
- Amach Town Council
- Barr
- Itek
- Agweng Town Council
- Amach

DISTRICTS IN THE NORTH WESTERN

- Arua
- Pakwach
- Nebbi
- Koboko

Sub County/Town Council/Municipality in Arua District

- Udupi Sub County
- Arua Municipality
- Adumi Sub County
- Aroi Sub County
- Ayivuni Sub County
- Dadamu SubCounty
- Manibe Sub County
- Oluko Sub County
- Pajulu Sub County
- Anyiribu Sub County
- Offaka Sub County
- Ogokko Sub County
- Okollo Sub County
- Pawor SubCounty
- RhinoCampSubCounty
- Rigbo Sub County
- Uleppi SubCounty
- Aii-vu Sub County
- Bileafe Sub County
- Katrini Sub County
- Omugo SubCounty
- Uriama SubCounty
- Ajia Sub County
- Arivu SubCounty
- Logiri SubCounty
- Vurra SubCounty

Sub County/Town Council/Municipality in Nebbi District

- Nebbi Municipality
- Parombo Sub County
- Akworo Sub County
- Atego Sub County
- Erussi Sub County
- Kucwiny Sub County
- Ndhew Sub County
- Nebbi Sub County
- Nyaravur Sub County
- Nebbi Town Council

Sub County/Town Council/Municipality in Pakwach District

- Panyango Sub County
- Panyimur Sub County
- Alwi Sub County
- Wadelai Sub County
- Pakwach Town Council
- Pakwach Sub County

Sub County/Town Council/Municipality in Koboko District

- Dranya Sub County
- Kuluba Sub County
- Koboko Town Council
- Lobule Sub County
- Ludara Sub County
- Midia Sub County

DISTRICTS IN THE SOUTH WESTERN REGION

- Bushenyi
- Mbarara
- Kanungu
- Rukungiri
- Ntugamo
- Kisoro
- Kabale

Ibanda

Sub County/Town Council/Municipality in Ibanda District

- Rukiri Sub County
- Kijongo Sub County
- Bisheshe Sub County
- Ibanda Town Council
- Igorora Town Council
- Ishongororo Sub County
- Ishongororo Town Council
- Kashangura Sub County
- Keihangara Sub County
- Kicuzi Sub County
- Kikyenkye Sub County
- Nsasi Sub County
- Nyabuikye Sub County
- Nyamarembe Sub county
- Rushango Town Council

Sub County/Town Council/Municipality in Kabale District

- Kaharo Sub County
- Buhara Sub County
- Kabale Municipality
- Buhara Sub County
- Butanda SubCounty
- Kaharo SubCounty
- Kamuganguzi SubCounty
- Katuna Town Council
- Kitumba Sub County
- Kyanamira Sub County
- Maziba Sub County
- Rubaya SubCounty
- Bubaare Sub County
- Bufundi Sub County
- Hamurwa Sub County
- Hamurwa Town Council

Ikumba Sub County

Muko Sub County

Nyamweru Sub county

Ruhija Sub County

Bukinda Sub County

Kamwezi Sub County

Kashabya Sub County

Muhanga Town Council

Rwamucucu Sub County

Sub County/Town Council/Municipality in Kisoro District

Kanaba SubCounty

Murora SubCounty

Bukimbiri Sub County

Busanza Sub County

Chahi Sub County

Kirundo Sub County

Kisoro Town Council

Muramba Sub County

Murora SubCounty

Nyabwishenya Sub County

Nyakabande Sub County

Nyakinama Sub County

Nyarubuye Sub County

Nyarusiza Sub County

Nyundo Sub County

Sub County/Town Council/Municipality in Kanungu District

Katete Sub County

Kayonza Sub County

Butogota Town Council

Kambuga Sub County

Kambuga Town Council

Kanungu Town Council

Kanyantogoro Sub County

Kihihi Sub County

Kihihi Town Council

- Kinaba Sub County
- Kirima Sub County
- Mpungu Sub County
- Nyakinoni Sub County
- Nyamirama Sub County
- Nyanga Sub County
- Rugyeyo Sub County
- Rutenga Sub County

Sub County/Town Council/Municipality in Mbarara District

- Bukiiro Sub County
- Rubindi Sub county
- Bubaare Sub County
- Kagongi Sub County
- Kashare Sub County
- Rubaya Sub County
- Rwanyamahembe SubCounty
- MbararaMunicipality
- Bugamba SubCounty
- Mwizi Sub County
- Ndejja Sub County
- RugandoSubCounty

Sub County/Town Council/Municipality in Bushenyi District

- Nyabubare Sub County
- Kyamuhunga Sub County
- Bushenyi-Ishaka Municipality
- Bitooma Sub County
- Bumbaire Sub County
- Ibaare Sub County
- Kakanju Sub County
- Kyabugimbi Sub County
- Kyeizooba Sub County
- Nyabubare Sub County
- Ruhumuro Sub County

Sub County/Town Council/Municipality in Rukungiri District

- Nyakishenyi Sub County
- Nyarushanje Sub County
- Kebisoni Town Council
- Kebisoni Sub County
- Buyanja TownCouncil
- Buyanja SubCounty
- Bugangari SubCounty
- Ruhinda SubCounty
- Bwambara Sub County
- Buhunga Sub County
- Nyakagyeme Sub County
- Rukungiri Municipal Council

Sub County/Town Council/Municipality in Ntungamo District

- Ntungamo Municipal council
- Bwongera Sub County
- Kagarama Town Council
- Kibatsi Sub County
- Nyabihoko Sub County
- Rwashameire Town Council
- Itojo Sub County
- Kitwe Town Council
- Ntungamo Sub County

Parish/Ward/Division _____

Village/Cell _____

CATEGORY OF ENTERPRISE

- Fish Farm or Fish Farmer
- Fish Feed Producer/Manufacturer
- Ingredient Supplier
- Research
- Academia
- Extension Service Provider
- Importer (Feeds or Ingredients)

- Fish Feed Traders/Stockiests/Distributor
- PolicyMakerandImplementere.g.NEMA,MAAIF,MTICetc.
- LaboratoryTechnician
- Ingredient Producer

RESPONDENT BIO-DATA

Name of Respondent

This should be the name of the person being interviewed

What is your role in this enterprise?

- Owner
- Manager
- Technician
- Lecturer
- Casual Worker
- Research Officer
- Aquaculture Extension Worker
- Commissioner
- Permanent Secretary
- Others (Specify)

If others, please specify your role in this enterprise

Phone Contact of the Respondent

This should be the phone contact of the farmer e.g. 0776xxxxxx

Gender of the Respondent

This should be the gender of the respondent

- Male
- Female
- Others

If others, please specify the gender

Age of the Respondent

- Below 18 Years
- 18 - 35 Years
- Above 35 Years

Level of Education

This should be the level of education of the owner

- Primary
- Ordinary Level (O - Level)
- Advanced Level (A - Level)
- Tertiary(Diploma, Degree, Masters, PhD, Graduate Certificate)
- Vocational Institute
- Others

If others, please specify the level of education

Name of Respondent

If it different from that of the farmer

FISH PRODUCTION AT THE FARM LEVEL

Name of Respondent

The person ANSWERING the questionnaire

What is your role in thisfish farm?

Role of the respondent

- Owner
- Manager
- Technician/Worker
- Others

If others, please specify your role in the farm

What is the name of the Proprietor?

If different from the name of respondent

When was this farm established?

What motivated you to start the fish farm?

- Income generation
- Fish for home consumption
- Availability of a good site for fish farming
- Looking for employment
- There was a ready market for fish
- Decline in capture fisheries
- Hobby
- It is my profession
- Others

If others, please specify what prompted you to start fish farming

If MANAGER, TECHNICIAN or WORKER, how many years of experience do you have of working on fish farm?

- 0 - 5 years
- 6 - 10 years
- 11 - 15 years
- 16 - 20 years
- 21 - 25 years
- 26 - 30 years
- Above 30 years

How is this farm or enterprise owned?

- Individual
- Family
- Group/Community
- Others

If others, please specify the ownership of the farm

What is the classification of this fish farm?

- Subsistence smallholder fish farm
- Profit oriented small-scale fish farm
- Emerging commercial fish farm
- Established commercial or industrial fish farm
- Others

If others, please specify the classification of the farm

What type of fish species are reared/produced in this farm?

- Tilapia
- Catfish
- Mirror Carp
- Others

If others, please specify the fish species reared at the farm

How much of the TILAPIA species do you produce per year (kg per year)?

How much of the CATFISH species do you produce per year (kg per year)?

How much of the MIRROR CARP species do you produce per year (kg per year)?

If others, how much of the OTHER species do you produce per year (kg per year)?

Provide the name of the species and the weight produced e.g. Labeo - 1000kg

What fish species do you produce more than the others?

- Tilapia
- Catfish
- Mirror Carp
- Others

If others, please specify the species that you produce more than the others

What is the reason behind producing more CATFISH than the other types of fish?

- It is omnivorous (meaning it can literally eat almost anything)
- Grows fast
- Tolerates relatively poor water quality (e.g. low oxygen, slightly acidic water etc.)
- It can be raised in high densities, resulting in high net yields
- It attains higher price than other types of fish
- It can be sold live at the market
- It requires less space, time, money etc.
- Has a higher feed conserving rate
- Resistant to diseases
- Do not reproduce in the production or rearing system
- The fry/fingerlings are readily available
- Others (specify)

If others, please specify the reason behind producing more CATFISH than the other types of fish**What is the reason behind producing more TILAPIA than the other types of fish?**

- Highly marketable
- Tolerant to poor water quality
- They eat a wider range of natural food organisms i.e. can grow on just fertilization
- Easy to breed
- Low cost of fry/fingerlings
- Others (specify)

If others, please specify the reason behind producing more TILAPIA than the other types of fish**Why do you produce MIRROR CARP more than the other species?****What is the reason behind producing more MIRROR CARP than the other types of fish?**

- Grow well in low temperature areas
- Tolerate very low oxygen levels.
- It has a very high adaptive capability to both the environment and food
- Grows big in weight
- Can feed on grass
- Others (specify)

If others, please specify the reason behind producing more MIRROR CARP than the other types of fish

What is the reason behind producing more of the OTHER types than the tilapia, catfish or mirror carp?

provide the name of the species and the reason e.g. Labeo - It is highly marketable; easy to grow etc.

What fish species has the least problem to rear?

- Tilapia
- Catfish
- Mirror Carp
- Others (specify)

If others, please specify the species considered the least problem to rear

Why do you consider CATFISH as having the least problems to rear?

- Disease resistant-less attacked by illness
- Grows very fast
- High survival rates
- Can withstand poor water quality; survives even in not so clean waters
- Eats wide variety of foods –plants, insects, earthworms, smaller fish, dry rations
- Highly marketable
- Does not reproduce in the pond
- Others (specify)

If others, please specify why CATFISH is considered as the least problematic

Why do you consider TILAPIA as having the least problem to rear?

- Responds well to a variety of feeds
- Can survive and grow well in a wider range of temperature (22 to 32 degree Celsius) Has
- a high market demand
- Easy to get seeds
- High growth rate
- Others

If others, please specify why TILAPIA is considered as the least problematic

Why do you consider MIRROR CARP as having the least problem to rear?

- Fast growth rates
- Big size at harvest
- Can survive and grow well in cold weather (below 20 degree Celsius)
- Accept a variety of feed types and quality (wide variety of foods—insects, earthworms, dry rations, decaying matter)
- can withstand a wider range of water quality; survives in muddy waters
- Others

If others, please specify why MIRROR CARP is considered as the least problematic

Why do you consider the OTHER species as having the least problem to rear?

How much time do you give the fish farming business?

- Full time
- Part time

If part time, please mention the other activities that you do.

- Livestock Rearing
- Crop Farming
- Employed by Government or Private Entity
- Trading or Business
- Others (Specify)

If others, please specify the other activities that you do.

What percentage of your income is derived from this fish farm?

- 0 - 10%
- 11 - 20%
- 21 - 30%
- 31 - 40%
- 41 - 50%
- 51 - 60%
- 61 - 70%
- 71 - 80%
- 81 - 90%
- 91 - 100%

FISH FEEDS ACCESS AND FEEDING PRACTICES

Do you fertilize your ponds?

- Yes
- No

If YES, which type of fertilizers do you use?

- Organic Fertilizers e.g. cow dung, chicken droppings, composite manure etc.
- Inorganic Fertilizers e.g DAP, NPK, Urea etc.

What inorganic fertilizers do you use?

What organic fertilizers do you use?

Do you feed your fish at this farm?

- Yes
- No

If yes, which types of fish feeds do you use?

- Complete manufactured
- On-farm feeds
- Others

If OTHERS, please specify the type of feeds used

Pick a sample of the different feeds and record the details (e.g. source, name of manufacturer, CP content (if applicable))

If on-farm feed is used, what is the source of the feed?

- Made by own-farm
- Bought from other farm

If bought from other farm, what is the name of the farm/ farmer?

If made by own farm, who provided you the technical knowledge?

- Government Aquaculture Extension Worker
- Private Aquaculture Extension worker
- Feed Producer
- Veterinarian
- Research(NAR Oor University)
- Media
- Others

If others, please specify the source of the technical assistance or advice

If made by own farm, what ingredients do you use for fish feed production?

- Mukene/Silver fish
- Whole maize
- Maizebran
- Soybean cake
- Soybean meal
- Soybean fullfat
- Bloodmeal
- Cotton seed cake
- Groundnut cake
- Bone meal
- DL-Methionine
- Di-Calcium Phosphate
- Limestone
- Lysine-HCL
- Brewer's grain
- Pern kerncake
- Ricebran
- Cassava
- Wheat bran
- Groundnut seeds
- Millet
- Palm oil
- Fish oil
- Sorghum
- Fats/Vegetable oil
- Sunflower cake
- Caradina
- Premix
- Salt
- Shells
- Others

What is the source of the MUKENE?

e.g. name of landing site, market etc.

What is the cost (Ugx/kg) of the Mukene/Silverfish?

What is the source of the soybean cake?

What is the cost (Ugx/kg) of the soybean cake?

What is the source of the soybean meal?

What is the cost (Ugx/kg) of the soybean meal?

If made by own farm, what is the source of the soybean fullfat?

What is the cost (Ugx/kg) of the soybean fullfat?

If made by own farm, what is the source of the blood meal?

What is the cost (Ugx/kg) of the blood meal?

If made by own farm, what is the source of the COTTON SEED CAKE?

What is the cost (Ugx/kg) of the cotton seed cake?

If made by own farm, what is the source of the groundnut cake?

What is the cost (Ugx/kg) of the groundnut cake?

If made by own farm, what is the source of the bone meal?

What is the cost (Ugx/kg) of the bone meal?

If made by own farm, what is the source of the DL-Methionine?

What is the cost (Ugx/kg) of the DL-Methionine?

If made by own farm, what is the source of the Di-Calcium Phosphate?

What is the cost (Ugx/kg) of the Di-Calcium Phosphate?

If made by own farm, what is the source of the limestone?

What is the cost (Ugx/kg) of the limestone?

If made by own farm, what is the source of the lysine-HCL?

What is the cost (Ugx/kg) of the lysine-HCL?

If made by own farm, what is the source of the salt?

What is the cost (Ugx/kg) of the salt?

If made by own farm, what is the source of the brewer's grain?

What is the cost (Ugx/kg) of the brewer's grain?

If made by own farm, what is the source of the whole maize?

What is the cost (Ugx/kg) of the whole maize?

If made by own farm, what is the source of the maize bran?

What is the cost (Ugx/kg) of the maize bran?

If made by own farm, what is the source of the pern kern cake?

What is the cost (Ugx/kg) of the pern kern cake?

If made by own farm, what is the source of the rice bran?

What is the cost (Ugx/kg) of the rice bran?

If made by own farm, what is the source of the cassava?

What is the cost (Ugx/kg) of the cassava?

If made by own farm, what is the source of the wheat bran?

What is the cost (Ugx/kg) of the wheat bran?

If made by own farm, what is the source of the premix?

What is the cost (Ugx/kg) of the premix?

If made by own farm, what is the source of the groundnut seeds?

What is the cost (Ugx/kg) of the groundnut seed?

If made by own farm, what is the source of the millet?

What is the cost (Ugx/kg) of the millet?

If made by own farm, what is the source of the palm oil?

What is the cost (Ugx/litre) of the palm oil?

If made by own farm, what is the source of the fish oil?

What is the cost (Ugx/litre) of the fish oil?

If made by own farm, what is the source of the sorghum?

What is the cost (Ugx/kg) of the sorghum?

If made by own farm, what is the source of the fats/vegetable oil?

What is the cost (Ugx/litre) of the fat/vegetable oil?

If made by own farm, what is the source of the sunflower cake?

What is the cost (Ugx/kg) of the sunflower cake?

If made by own farm, what is the source of the caradina?

What is the cost (Ugx/kg) of the caradina?

If made by own farm, what is the source of the shells?

What is the cost (Ugx/kg) of the shells?

If made by own farm, what is the source of the other ingredients?

What is the cost (Ugx/kg) of the other ingredients?

What measures do you take to ensure quality of the ingredients sourced?

- I produce the ingredients myself
- Obtain from reputable source
- I carry out personal checks at purchasing point
- Others

If others, please specify the measures taken to ensure the quality of the ingredients

If the feed is bought from other farm, how do you ascertain quality of the feed?

- Using the FCR
- Monitor fish growth
- Fish response to the feed
- Uniformity of pellet size
- Others

If others, please specify how you ascertain the quality of the fish feeds

Why do you make your own feeds at the farm?

- It is cheap to produce the feeds at the farm than buying already manufactured feeds
- The feeds on the market are of poor quality
- There is no nearby place to buy the complete feeds
- I was trained in making the feeds
- Others (Specify)

What is the cost (ugx/kg) of your on-farm feeds?

Have you ever analysed the on-farm feeds?

- Yes
- No

If yes, what is the proximate composition or nutritional content of the feeds?

In terms of CP%, Fat/Lipids/ Fibre/Ash/Dry matter

What challenges do you face when using on-farm feeds?

- Inconsistency in the quality of the feeds
- Lack of technical knowledge on on-farm feed production
- Lack of access to technical knowledge on non-farm feed production and usage
- Not easy to obtain the quantities required
- Poor quality of ingredients
- High cost of ingredients
- High cost of energy/power
- Limited technical knowledge on operating the machinery
- Seasonal fluctuations in availability of ingredients
- Limited knowledge on feasible ingredients
- Others

If others, please specify the challenges of using on-farm feeds

Suggest solutions to the challenges

What challenges do you face when using on-farm feeds bought from other farms?

- Inconsistent quality
- Poor quality of the feed
- Not easy to obtain the quantities needed
- Limited technical knowledge about on-farm feed usage
- High cost of the feed
- Others

If others, please specify the challenges faced with using on-farm feeds made from another farm

What commercially manufactured feeds do you use?

- Koudjis/Kaffika Feeds
- Ugachick Fish Feeds
- Jonak Feeds
- KARDC Feeds
- Ranaan Feeds
- Others (specify)

If others, please specify the name of the feeds

Why did you choose Koudjis/Kaffika Feeds?

- It is readily available in the area
- The ingredients used in the feed are finely ground.
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, please specify why you choose Koudjis/Kaffika Feeds?

Where do you get or source the koudjis or kaffika feeds from?

name of feed, supplier and location if applicable

What is the unit cost (ugx/kg) of the Koudjis/Kaffika feeds?

What is the proximate protein composition of the Koudjis feed?

Why did you choose Ugachick Fish Feeds?

- It is readily available in the area
- The ingredients used in the feed should be finely ground.
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, why do you choose ugachick fish feeds

Where do you get or source the ugachick fish feeds from?*name of feed, supplier and location if applicable*

What is the unit cost (ugx/kg) of the Ugachick feeds?

What is the proximate protein composition of the Ugachick Fish Feeds?

Why did you choose Jonak Feeds?

- It is readily available in the area
- The ingredients used in the feed should be finely ground.
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, please specify why you chose Jonak Feeds?

Where do you get or source the Jonak feeds from?*name of feed, supplier and location if applicable*

What is the unit cost (ugx/kg) of the Jonak feeds?

What is the proximate protein composition of the Jonak feeds?

Why did you choose KARDC Feeds?

- It is readily available in the area
- The ingredients used in the feed should be finely ground
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, please specify why you chose KARDC feeds?

Where do you get or source the KARDC feeds from?

name of feed, supplier and location if applicable

What is the unit cost (ugx/kg) of the KARDC feeds?

What is the proximate protein composition of the KARDC feed?

Why did you choose Ranaan Feeds?

- It is readily available in the area
- The ingredients used in the feed should be finely ground.
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, please specify why you chose ranaan feeds

Where do you get or source the Ranaan feeds from?

name of feed, supplier and location if applicable

What is the unit cost (ugx/kg) of the Ranaan feeds?

What is the proximate protein composition of the RANAAN feed?

Why did you choose other feeds?

- It is readily available in the area
- The ingredients used in the feed should be finely ground.
- The feed is fine i.e. does not have dust
- The pellets are firm and stable on water stability
- The pellets are uniform size and of correct size. Fish can easily swallow them.
- The feed is palatable to the fish with a good taste, smell and feel.
- The feed is cost effective i.e. the FCR is low
- Others (Specify)

If others, please specify why you chose the other feeds above

If others, where do you get or source the feeds from?

name of feed, supplier and location if applicable

What is the unit cost (ugx/kg) of the other feeds?

What is the proximate protein composition of the OTHER feed?

If different feeds are used, how are the feeds used/applied?

i.e. complete manufactured feeds and on-farm feeds

- Alternating
- Concurrent
- Others (specify)

If others, how are the feeds applied?

If it is a combination, which type of feed is more dominantly used and why?

Have you established the food conversion ratio (FCR) of the feeds you use?

FCR = the amount of the feed you need to raise a kilo of the fish

- Yes
- No

If yes, what is the FCR when you use Koudjis/Kifika feeds?

If yes, what is the FCR when you use Ugachick fish feeds?

If yes, what is the FCR when you use Jonak feeds?

If yes, what is the FCR when you use KARDC feeds?

If yes, what is the FCR when you use Ranaan feeds?

If others, what is the FCR when you use the other feeds?

If yes, what is the FCR of the on-farm feeds?

Do you always obtain and use the right type of feeds needed by the different fish species and stage of growth?

Yes

No

If no, why don't you obtain the right quantity of feeds?

Out of stock on the market

Too expensive to get what I need

I did not know different species require different types and quantities of feeds

I have been giving different species of fish same feed and have not had any problem

Others

If others, please specify why you do not obtain the right quantity of feeds

What stages of fish do you have at the farm?

- Larval
- Fry
- Fingerlings
- Juveniles
- Adult
- Brood stock

How often do you feed the larval fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5X

What is the proximate composition or nutritional content of the larval feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

How often do you feed the fry fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5x

What is the proximate composition or nutritional content of the fry feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

How often do you feed the fingerling fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5x

What is the proximate composition or nutritional content of the fingerling feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

How often do you feed the juvenile fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5X

What is the proximate composition or nutritional content of the juvenile feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

How often do you feed the Adult fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5X

What is the proximate composition or nutritional content of the adult fish feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

How often do you feed the brood stock fish?

- Once a day
- Twice a day
- Thrice a day
- Four times a day
- Five times a day
- Above 5X

What is the proximate composition or nutritional content of the brood stock fish feed?

e.g. Protein Content - 57%, Moisture - 10%; Ash - 5% etc. Look at the label (if applicable)

What method do you use to feed the fish?

- By hand broad casting
- Automated feeding
- Demand feeding
- Feed by response
- Others

If others, please specify the method used to feed the fish

How do you determine the amount of feed to give your fish?

- Weather
- Fish response to the feeds
- Size of fish (percentage body weight of the fish)
- Age of fish
- Others

If others, please specify how you determine the amount of feeds

What is your targeted average market size of your fish harvest per cultured species?

e.g. Catfish - 1000g; Tilapia - 350g etc

How long does it take you to make this fish attain the targeted market weight per species?

Do you keep feeds and feeding records?

- Yes
- No

What records do you keep?

- Type of feeds
- Cost of feeds
- Source of feeds
- Date of delivery
- Amount of feed per day per pond/rearing unit
- Amount of fish harvested per rearing unit
- Others

If others, please specify the records

How do you use the feeds and feeding records that you keep?

- Determine feeding rates
- Determine the FCR
- Profitability of the farm
- Toplanaheadforthenextproductioncycle
- Determine the selling price of the fish
- Others

If others, please specify the use of the feeds and feeding records

Why don't you keep records?

- Not important
- I do not know how to write and record
- It is time consuming
- Ihavenoideaonwhattorecordit
- Others

If others, please specify why you do not keep the feed and feeding records

Do you keep fish production records?

- Yes
- No

Why don't you have production records? I

- have no idea on what to record it
- It is timeconsuming
- I donotknowhowtowriteandrecord
- NotImportant
- Others

If others, please specify why you do not keep production records

If yes, what production records do you keep?

- Amount or volume of fish produced per rearing unit
- Stocking records
- Harvesting records
- Health records
- Survival rates
- Average body weight (ABW) and size categories
- The length of production cycle
- Others

If others, please specify the production records kept at the farm

How do you use the production records at the farm?

- Monitor fish growth
- Determine the FCR
- Schedule production
- Plan for marketing of fish
- Financial Analysis
- Determine profitability
- Access credit
- Plan for the next production cycle
- Adjust the business plan
- Others

Do you keep financial records?

- Yes
- No

What financial records do you keep?

- Cash Sales records
- Salary & Wages
- Credit Sales records
- Credit sales
- Cost of feeds
- Others (Specify)

If others, please specify the financial records that you keep

How do you use the financial records that you keep?

- Financial analysis
- Profitability
- Access to credit
- To plan for the next production cycle
- To adjust in the business plan
- Others

If others, please specify what how useful the financial records are

Why don't you keep financial records?

Why don't you keep financial records?

- Not important
- Time consuming
- I do not know how to write
- Others (specify)

If others, please specify why you do not keep financial records

What do you suggest to improve on production and financial record keeping?

What challenges do you face in accessing fish feeds?

- High transportation costs
- Unreliability of supply
- High cost of fish feeds
- Lack of knowledge on feed usage
- Poor quality feeds
- High transport costs
- Others

If others, please specify the challenges in accessing fish feeds

What challenges do you face in utilising fish feeds?

- Estimating the correct amount to feed
- Adjusting the ration
- Selecting the right feed
- Others

If others, please specify the challenges faced during utilising feed

What solutions do you propose to address the challenges?

Is on-farm feed production a possible solution for improving access to fish feeds?

- Yes
- No

How will on-farm feed production improve access to the fish feeds?

If no, why

What is the potential benefit of women and youth involvement in on-farm feed production?**Do you have any particular training related to environment management for your fish farming business?**

- Yes
- No

Do you have an Environment Management Plan for your fish farming business?

- Yes
- No

Is your fish farm or fish farming business cleared by NEMA through EIA process?

- Yes
- No

Which organization monitors your environment management activities?

- NEMA
- MAAIF
- Local Authorities
- Others

If others, please specify the organisations that monitor environment management activities

Do you think use of fish feeds has any negative effect on the water bodies and the environment?

- Yes
- No

If yes, what negative effects do the fish feeds have on the water bodies and the environment?

If no, why do you think feeds have no negative effects on the water bodies and the environment?

How do you handle your effluents (liquid waste) from your fish farm?

- Released without treatment to a specially constructed pond
- Flows out on its own to outside the farm to the wetland or other natural water course
- It flows out to specially constructed ponds for treatment and then released into natural water course
- Other (specify

If others, please specify how you handle your effluents (liquid waste) from your fish farm

Have you received any advice on fish feeds and their usage?

- Yes
- No

Who provided the advice on the fish feeds?

- Government Aquaculture Extension Worker
- Private Extension Service Providers (PESPs)
- Veterinarian
- Feed producer
- Fellow farmer
- Feed distributor/trader
- Others

If others, please specify the provider of advice on fish feeds

How often do the providers of advice on the fish feeds visit you?

Are you aware of the Private Extension Service Providers (PESPs)?

- Yes
- No

If Private Extension Service Providers (PESPs), are they registered and certified by DiFR - MAAIF?

- Yes
- No
- Do not know

Who are PESPs, their contacts and where are they located or found?

Do you store feeds at the farm?

- Yes
- No

Where are the feeds stored?

- Store dedicated to only fish feeds
- Store mixed with other animal feeds and farm inputs
- Others

How is the state of the dedicated store?

- Aerated
- Pallets available
- On a bare floor
- Free from rodents
- Others

If others, please specify the state of the store

For how long do you store the feeds?

- Less than 1 month
- 2 - 3 months
- 4 - 6 months
- Over 6 months

How much feed by volume do you use a production cycle?

- 0.5 - 1.0 ton
- >1.0 - 3.0 tons
- > 3.0 - 5.0 tons
- > 5.0 tons

Do you weigh feeds before feeding?

- Yes
- No

Do you sample fish regularly?

- Yes
- No

Do you check for expiration date when buying fish feeds?

- Yes
- No

Do you examine the form of the feed for caking, moulding, change of color etc.?

- Yes
- No

What challenges do you face in accessing technical advice on fish feeds?

- Few technical personnel
- Extension personnel do not visit
- Use very scientific language not easy to comprehend
- extension workers ask for money which I do not have
- No advice at all
- Quack extension workers
- Others

If others, please specify the challenges faced in accessing technical advice on fish feeds

How can the challenges be addressed?

How can digital media channels or mobile app be used to promote access, utilization and other relevant information on fish feeds among various chain actors?

RESEARCH AND ACADEMIA

Name of Organisation

Are you aware of any research work carried out on feeds?

- Yes
- No

What kind of research has been carried out?

- Appropriate feeding regimes for different fish species
- Alternative plant ingredients for feed production
- Alternative animal (insect larvae) ingredients for feed production
- Improving quality of feeds
- Use of less competitive potential fish feed ingredients
- Replacement of expensive fishmeal with less costly alternative protein sources
- Performance evaluation of different types of fish feed
- Provided ingredients
- Others

If others, please specify the kind of research undertaken on feeds**How have the farmers participated in the research?**

- Not participated
- Proposing possible fish feed research agenda
- Providing production facilities (ponds, tanks, cages) for on-farm trials and feed development
- Sourcing ingredients
- Hosted on-farm trials
- Identification of alternative potential fish feed ingredients
- Respondent to questionnaires
- Feeding of fish and keeping daily records during on-farm trials
- Others (specify)

If others, please specify how the farmers have participated in the research**How do you rate the relevance of the research carried out on the feeds?**

- Very relevant
- Fairly relevant
- Not relevant

Why is the research rated "VERY RELEVANT"?**Why is the research rated "FAIRLY RELEVANT"?****Why is the research rated "NOT RELEVANT"?**

What fish feeds related problems has the research tackled/solved?

- Feed formulations
- Use of non-convectional or potential ingredients for fish feeds
- Others

If others, please specify the fish feed related problems that research has tackled/solved

Which other aspects of fish feeds should research handle and why?

- Replacement of fish meal with other alternative sources of protein
- Others

If others, please specify the other aspects of research that should be handled on feeds

Why should those aspects of research on fish feed be handled?

What challenges are faced in research work on fish feeds?

Besides fish meal, what are the potential alternative fish feed ingredients?

What is the role of smallholder fish farmers (youth and women) in fish feed production towards transition from subsistence to commercial fish farming?

How should feed production and usage be carried out to ensure environmental sustainability?

Do you provide any training on fish feeds?

- Yes
- No

If No, why don't you provide training on fish feeds?

Which topics do the trainings cover?

What type of trainees do you offer the training?

- Fish farmers
- Feed producers
- Fish feed traders
- Others

If others, please specify the trainees

How often do you provide training?

Who initiates the training?

How do intending trainees know about the trainings?

Where are the trainings conducted from?

On average, how long do the training sessions last?

What is the average cost of a particular training?

What challenges do you encounter in offering training on fish feeds?

Suggest solutions to address the challenges

FEED INGREDIENT SUPPLIER

When did you start dealing in the supply of ingredients?

What prompted you to start the business?

What prompted you to start the business?

- Supplement my income
- I saw an opportunity
- Hobby
- Others (specify)

If others, please specify what prompted you to start the business

What ingredients for fish feed production do you supply?*mark all that you supply*

- Mukene/Silver fish
- Whole maize
- Maizebran
- Soybean cake
- Soybean meal
- Soybean fullfat
- Bloodmeal
- Cotton seed cake
- Groundnut cake
- Bone meal
- DL-Methionine
- Di-Calcium Phosphate
- Limestone
- Lysine-HCL
- Brewer's grain
- Pern kerncake
- Ricebran
- Cassava
- Wheat bran
- Groundnut seeds
- Millet
- Palm oil
- Fish oil
- Sorghum
- Fats/Vegetable oil
- Sunflower cake
- Caradina
- Premix
- Salt
- Shells
- Others

If others, please specify the ingredients supplied

Where do you get the other ingredients from?

What quantities of the other ingredients do you buy?

Where do you get the salt from?

What quantities of salt do you buy?

Where do you get the premix from?

What quantities of premix do you buy?

Where do you get the caradina from?

What quantities of caradina do you buy?

Where do you get the sunflower cake from?

What quantities of sunflower cake do you buy?

Where do you get the fats/vegetable oil from?

What quantities of fats/vegetable oil do you buy?

Where do you get the sorghum from?

What quantities of sorghum do you buy?

Where do you get the fish oil from?

What quantities of fish oil do you buy?

Where do you get the palm oil from?

What quantities of palm oil do you buy?

Where do you get the millet from?

What quantities of millet do you buy?

Where do you get the groundnut seeds from?

What quantities of groundnut seeds do you buy?

Where do you get the wheat bran from?

What quantities of wheat bran do you buy?

Where do you get the cassava from?

What quantities of cassava do you buy?

Where do you get the rice bran from?

What quantities of rice bran do you buy?

Where do you get the pern kern cake from?

What quantities of pern ken cake do you buy?

Where do you get the brewer's grain from?

What quantities of brewer's grain do you buy?

Where do you get the lysine-HCL from?

What quantities of lysine-HCL do you buy?

Where do you get the limestone from?

What quantities of limestone do you buy?

Where do you get the Di-Calcium Phosphate from?

What quantities of Di-Calcium Phosphate do you buy?

Where do you get the DL-Methionine from?

What quantities of DL-Methionine do you buy?

Where do you get the bone ash from?

What quantities of bone ash do you buy?

Where do you get the groundnut cake from?

What quantities of groundnut cake do you buy?

Where do you get the cotton seed cake from?

What quantities of cotton seed cake do you buy?

Where do you get the blood from?

What quantities of blood do you buy?

Where do you get the soybean fullfat from?

What quantities of soybean fullfat do you buy?

Where do you get the soybean meal from?

What quantities of soybean meal do you buy?

Where do you get the soybean cake from?

What quantities of soybean cake do you buy?

Where do you get the mukene/silver fish from?

Probe for specific area e.g. landing site, market, households etc.

What quantities of mukene/silverfish do you buy?

e.g. 1000kg every month

Where do you get the whole maize from?

Probe for specific area e.g. landing site, market , households etc.

What quantities of whole maize do you buy?

Where do you get the maize bran from?

What quantities of whole maize do you buy?

How do you tell the quality and nutritional content of your ingredients?

- I trust the sources/producers of the ingredients
- I depend on what is already published and known in literature or general public
- I ensure that supply and delivery of ingredients are based on set safety and quality control measures.
- I have a portable nutritional analyser
- I use a moisture analyser
- Check every batch using a metallic prod
- I send samples of the ingredients to laboratory for testing
- Others

If others, please specify how you tell the quality and nutritional content of your ingredients

How do you handle your effluents (liquid waste) from processing of your ingredients?

- Release without treatment to a specially constructed waste pit
- Flows out on its own to outside the facility
- Flows out and directly to the natural water course
- It flows out to specially constructed ponds for treatment and then released into natural water course
- Others specify

If others, please specify how you handle your effluents (liquid waste) from processing of your ingredients

How do you handle the solid waste from your ingredient processing activities?

- Deposited outside the facility and ferried to the municipal landfill
- Deposited outside the facility, dried and burnt
- Recycled and taken by farmers as organic manure
- Deposited outside the facility and left to rot
- Deposited and regularly buried in the ground
- Other (specify)

If others, please specify how you handle the solid waste from your ingredient processing activities

What is the state of your ingredients in terms of mixture with non-ingredient materials?

- Pure grade, human edible level/state
- Pure grade, animal edible level/state
- Mixed with sand and other non-nutritional materials as demanded by clients
- Deliberately contaminated
- Others

If others, please specify the state of the ingredients

How do you transport the ingredients?

- On foot
- Bicycle
- Motorcycle
- Private vehicle (ownvehicle/hired)
- Publictransport
- Others(Specify)

If others, please specify the means of transport

How do you store the ingredients?

- The store is well aerated
- Moisture free
- Vermin control
- Others

If others, please specify

How do you package the ingredients for delivery and sale?

- 20 kg polythenes bags with an inner lining
- 50 kg polythenes bags with an inner lining
- 100 kg polythenes bags with an inner lining
- As requested by the customer (Customized)
- Others

If others, please specify the package

How do you brand the ingredients for delivery and sale?

- Don't brand
- Inscribed labels on the packaging
- Writeonthepackagingusingamarker/pen
- Putapieceofpaperinsidethebag
- Use different colours of the packaging
- Use different colours of the markers
- Others (Specify)

If others, please specify the how the ingredients are branded

Who are your customers of the ingredients?

- Feed Producers
- Producer Organisations (POs)
- Farmers
- Others

If others, please specify the customers of the ingredients

What kind of feed producers do your supply?

- Fish Feed producers
- Animal feed producers
- Human feed producers
- MiddlemenorSuppliersdifferentfeed producers
- Others

If others, please specify the kind of feed producers

What transaction modalities do you mainly engage in with your customers?

- Purchase orders
- Direct purchase
- Others

If others, please specify the transaction modalities

Do you always supply the ingredients to your customers (the local feed producers) in a timely and consistent manner?

- Yes
 No

If no, why do you fail to supply the ingredients?

- I don't have enough stock
 Fluctuating prices
 Others

If others, please specify why you fail to supply the ingredients

Do you have any particular training related to environment management of feed ingredient handling, processing, supply and delivery business?

- Yes
 No

Do you have an Environment Management Plan for your feeding ingredients sourcing, handling, processing, storage and delivery business?

- Yes
 No

What challenges you encounter in the fish feed ingredient business?

- Fluctuating prices
 Scarcity of raw materials
 Poor quality materials
 Not enough capital to stock
 Others

If others, please specify the challenges you encounter in the business

How can the challenges be addressed?

For the crop based ingredients, what measures do you suggest for increasing production?

- Encouraging and promoting contract farming with POs of crop farmers
 Others

If others, please specify the measures

Are there different roles for men, youth and women in the ingredients supply business?

- Yes
 No

If yes, which specific activities do women carry out in the fish feed ingredients supply business?

- Sorting
 Drying
 Packaging
 Labelling
 Grading
 Others

If others, please specify the roles of women

If yes, which specific activities do youth carry out in the fish feed ingredients supply business?

- Sorting
 Drying
 Packaging
 Labelling
 Grading
 Loading
 Grinding
 Mixing
 Others

If others, please the role of youth

What challenges do women employed in the fish feed ingredients supply business face?

How can the challenges be addressed?

What challenges do YOUTH employed in the fish feed ingredients supply business face?

How can the challenges be addressed?

Which opportunities exist for WOMEN in the fish feed ingredients supply business?

Which opportunities exist for YOUTH in the fish feed ingredients supply business?

Pick some samples and record details (source, ingredient name etc.) for laboratory analysis

LABORATORY**Name of the laboratory**

Who are your clients?

- Feed processors
- Farmers
- Ingredient Suppliers
- Traders
- Public Institutions
- Others

If others, please specify the clients

What products or feed products do you analyze?

- Ingredients
- Feeds
- Others

If others, please specify the products that you analyze

What type of feeds do you analyze?

- Animal feeds
- Poultry feeds
- Fish feeds
- Others

If others, please specify the type of feeds that you analyze

What ingredients do you analyze?

- Mukene
- Soybean
- Maize bran
- Cotton seed cake
- Sunflower
- Rice bran
- Others

If others, please specify the type of ingredients

Does your laboratory conduct or have the capacity to conduct fish feed or ingredients analysis in terms of nutrient composition?

- Yes
- No

What level of analysis can the laboratory do?

- Proximate
- Profiling

What profiling can the laboratory do?

- Amino acid profiling
- Fatty acid profiling
- Others

If others, please specify the kinds of profiling

If yes, list the categories and proportions (%) of your customers?

- Fish Feed Producers
- Fish Feed Ingredients Dealers
- Fish Farmers
- Regulators
- Scientists/Researchers
- Others

If others, please specify

What is your average time for providing proximate results to customers?

- Instant (less than an hour)
- Within a day
- Less than a week
- A week to two weeks
- Within a month
- Others

If others, please specify the time to release proximate analysis results

What is the average cost of proximate analysis for nutrition composition?

What is your average time for providing profiled results to customers?

- Less than a week
- One week
- Two weeks
- Three weeks
- Four weeks
- Others

If others, please specify the period it takes to profile feed or ingredient sample

What is the average cost of profiling for nutrition composition?

How many laboratory personnel do you employ?

How many of them are women?

Do you think they are enough?

- Yes
- No

If No, why? _____

What challenges do you face in running the lab business?

- Staff
- Low turn-up of clients
- Equipment brake down
- Expensive equipment
- High taxes
- Others

If others, please specify the challenges you face in running the laboratory

FISH FEED PRODUCTION

Name of the feed factory

What was the motive for its establishment?

What is the value (ugx/usd) of the establishment?

Are you a registered feed producer?

- Yes
- NO

Do you have machinery?

- Yes
- No

What is its installed capacity?

Is the machinery currently running at the installed or designed capacity?

- Yes
- No

If no, how is it running?

- Over capacity
- Under capacity

Why is it running over the installed capacity?

Why is it running under or below the installed capacity?

What is your daily feed production (tonnes or kg)?

What is your annual production capacity (metric tonnes)?

- Less than 1
- 1 - 5
- 6 - 10
- 11 -15
- 16 -20
- 21 -25
- 26 -30
- 31 -35
- 36 -40
- 41 -45
- 46 -50
- Above 50

Who are your suppliers of ingredients?

- Local Suppliers
- Regional Suppliers
- International Suppliers

Which of the following ingredients do you use in the production of fish feeds?

- Mukene/Silver fish
- Whole maize
- Maizebran
- Soybean cake
- Soybean meal
- Soybean fullfat
- Bloodmeal
- Cotton seed cake
- Groundnut cake
- Bone meal
- DL-Methionine
- Di-Calcium Phosphate
- Limestone
- Lysine-HCL
- Brewer's grain
- Pern kerncake
- Ricebran
- Cassava
- Wheat bran
- Groundnut seeds
- Millet
- Palm oil
- Fish oil
- Sorghum
- Fats/Vegetable oil
- Sunflower cake
- Caradina
- Premix
- Salt
- Shells
- Others

Where do you get the other ingredients from?

Where do you get the shells from?

Where do you get the salt from?

Where do you get the premix from?

Where do you get the caradina from?

Where do you get the sunflower cake from?

Where do you get the fat/vegetable oil from?

Where do you get the sorghum from?

Where do you get the fish oil from?

Where do you get the palm oil from?

Where do you get the millet from?

Where do you get the groundnut seeds from?

Where do you get the wheat bran from?

Where do you get the cassava from?

Where do you get the rice bran from?

Where do you get the pern kern cake from?

Where do you get the brewer's grain from?

Where do you get the lysine-HCL from?

Where do you get the limestone from?

Where do you get the Di-Calcium Phosphate from?

Where do you get the DL-Methionine from?

Where do you get the bone ash from?

Where do you get the groundnut cake from?

Where do you get the cotton seed cake from?

Where do you get the blood from?

Where do you get the soybean fullfat from?

Wheredoyougetthesoybeanmealfrom?

Wheredoyougetthesoybeancakefrom?

Where do you get the maize branfish from?

Where do you get the whole maize from?

Where do you get the mukene/silverfish from?

How do you determine the different proportions of ingredients you apply to your feed?

- Follow a standard formulae from feed formulation experts
- From general awareness and experience acquired from other feed producers
- Depends on farmer or client demands
- Use my own knowledge and experience in feed production

Do you have any contractual obligation with the supplier?

- Yes
- No

For which type of fish do you produce the feeds?

- Tilapia
- Common Carp
- Catfish
- Others

If others, please specify the type of fish

Which of the following methods of production do you use?

- Extrusion (Floating pellets)
- Pelleting (Sinking pellets)
- Grinding (Powder feed)
- Others

If others, please specify the method of feed production

What is the price (ugx/kg) of the floating feeds?

What is the price (ugx/kg) of the sinking feeds?

What is the price (ugx/kg) of the powder feeds?

Do you have the capacity to ascertain the nutritional profile of the feeds produced?

- Yes
- No

If no, where can you access such services

Pick samples, record and package for laboratory analysis

Which quality assurance measures do you have in place for the feeds you produce?

What challenges do you face during fish feeds production?

- High power tariffs
- Lack of adequate supply of ingredients
- Lack of skilled labour
- Others

If others, please specify the challenges faced

What are the possible recommendations or solutions to the challenges?

Have you conducted an Environmental Impact Assessment (EIA)?

Yes

No

In what year did you conduct the EIA?

How many employs do you employ in the feed production sector?

What are the terms of employment?

Permanent

Temporary

How many women do you employ?

How many women are employed on a permanent basis?

How many women are employed on a temporary basis?

Are there different roles for men and women during feed production in your industry?

Yes

No

What roles do the women play in feed production?

Finance management

Administration

Ingredient sorting

Ingredient loading

Mixing

Grinding/Milling

Pelleting/Extrusion

Drying

Cooling

Packaging

Storage or Bulking

Others

If others, please specify the roles of women in feed production

What specific problems affect equitable engagement of women and youth in fish feed production?

- Lack of capital
- Lack of skills
- Bias in terms of access to capital and other required resources
- Bias in capacity building
- Lack of interest and opportunities
- Cultural norms and or bias against women and youth.
- Other (specify)

If others, please specific problems affect equitable engagement of women and youth in fish feed production

What are the remedies and opportunities that can enhance women and youth involvement in feed production?

- Affirmativeactionintermsoffinancialsupporttowomenandyouth.
- Selectivetrainingbiasedtowardswomenandyouth.
- Exposure and provision of information to women and youth.
- Placementprogrammeformenandyouthinfeedproductionbusinesses.
- Provisionofmachinery,BMPsandtechnicalsupporttowomenandyouth.
- Policyandregulatoryinterventionbiasedtowardwomenandyouth.
- Others

If others, please specify the remedies and opportunities that can enhance women and youth involvement in feed production

What can be done to promote and increase opportunities for socially just, safe and rewarding youth employment and entrepreneurship in fish feed industry

- Affirmative action in terms of financial support to youth
- Exposure and provision of information to youth.
- Placementprogrammeformenandyouthinfeedproductionbusinesses.
- Provisionofmachinery,BMPsandtechnicalsupporttoyouth.
- Policyandregulatoryinterventionbiasedtowardyouth.
- Others

If others, please specify what can be done to promote and increase opportunities for socially just, safe and rewarding youth employment and entrepreneurship in fish feed industry

Mention specific opportunities women and youth can engage in as part of the fish feed production business?

- Suppliers and producers of ingredients
- Owners and operators of SMEs feed producing establishments
- Feed depot owners and managers.
- Skilled workers and business managers.
- Others

If others, please specify the opportunities women and youth can engage in as part of the fish feed production business

Suggest the areas for required training and technical support for enhancing women and youth's involvement in feed production value chain

- Business managerial skills.
- Investment management and planning.
- Technical feed production skills
- Feed ingredient sourcing and management
- Contractual operations and management
- Others (specify)

If others, please specify areas for required training and technical support for enhancing women and youth's involvement in feed production value chain

What type of energy do you use in feed production?

- Hydro Electric Power
- Solar Power
- Fossil Fuel (Generator)
- Others

If others, please specify the type of energy

What activities do you use the hydro electric power?

- Ingredient sorting
- Ingredient loading
- Mixing
- Grinding/Milling
- Pelleting/Extrusion
- Drying
- Cooling
- Packaging
- Storing/Bulking
- Others

If others, please specify the activities hydro power is used

What activities do you use the solar power?

- Ingredient sorting
- Ingredient loading
- Mixing
- Grinding/Milling
- Pelleting/Extrusion
- Drying
- Cooling
- Packaging
- Storing/Bulking
- Others

If others, please specify the activities that solar power is used

What activities do you use the fossil fuel (generator)?

- Ingredient sorting
- Ingredient loading
- Mixing
- Grinding/Milling
- Pelleting/Extrusion
- Drying
- Cooling
- Packaging
- Storing/Bulking
- Others

If others, please specify the activities that fossil fuel (generator) is used

What is the unit cost of hydro electric power (KWh) in feed production?

What is the unit cost of fossil fuel (generator) (litres/hour) in feed production?

How long (months) did it take you to connect the hydro electric power?

- ≤ 1 month
- 2 -3
- 4 -5
- 6 -7
- Above 7

What was the cost (in ugx) of installation?

What energy related challenges do you encounter?

- High power charges
- Unreliable supply
- Inadequate supply
- Others

If others, please specify the challenges related to energy

Suggest any recommendations or solutions to the problems

FISH FEED IMPORTERS

In what year did you start importing fish feeds into the country?

From which country do you import the fish feeds?

What is the brand name of the feeds you import?

What type of feeds do you import?

- Pellets
- Powder
- Crumble
- Others

If others, please specify

What is the nutritional content of the various feed types?

How much fish feeds (tons/kg) do you import in a particular consignment?

What is the cost (ugx/kg) of the feeds imported per ton?

How often do you import the fish feeds?

What is the selling price of the feeds?

What are the distribution channels/networks of your fish feeds?

Which districts do your customers mainly come from?

- Abim
- Adjumani
- Agago
- Alebtong
- Amolatar
- Amuria
- Amuru
- Apac
- Arua
- Bududa
- Budaka
- Bugiri
- Bukwa
- Bulisa
- Bundibugyo
- Bushenyi
- Busia
- Butalenja
- Dokolo
- Gulu
- Hoima
- Ibanda
- Iganga
- Jinja
- Kaabong
- Kabale
- Kabarole
- Kaberamaido
- Isingiro
- Kalangala
- Kaliro
- Kampala

- Kamuli
- Kamwenge
- Kanungu
- Kapchorwa
- Kasese
- Katakwi
- Kayunga
- Kibaale
- Kiboga
- Kiruhura
- Kisoro
- Kitgum
- Koboko
- Kotido
- Kumi
- Kyenjojo
- Lira
- Luwero
- Maracha
- Masaka
- Masindi
- Mayunge
- Mbale
- Mbarara
- Mityana
- Moroto
- Moyo
- Mpigi
- Mubende
- Mukono
- Nakapiripirit
- Nakaseke
- Nakasongola
- Namutumba

- Nebbi
- Ntungamo
- Oyam
- Pader
- Pallisa
- Rakai
- Rukungiri
- Sembabule
- Sironko
- Soroti
- Tororo
- Wakiso
- Yumbe
- Agago
- Alebtong
- Amudat
- Buhweju
- Buikwe
- Bukedea
- Bukomasimbi
- Bulambuli
- Butambala
- Buvuma
- Buyende
- Gomba
- Kalungu
- Kibuku
- Kiryandongo
- Kole
- Kween
- Kyankwazi
- Kyegegwa
- Lamwo
- Luuka

- Lwengo
- Lyantonde
- Manafwa
- Mitooma
- Namayingo
- Napak
- Ngora
- Nwoya
- Otuke
- Rubirizi
- Serere
- Sheema
- Zombo
- Kagadi
- Kakumiro
- Omoro
- Rubanda
- Namisindwa
- Pakwach
- Butebo
- Rukiga
- Kyotera
- Bunyangabu
- Nabilatuk
- Bugweri
- Kasanda
- Kwanja
- Kapelebyong
- Kikuube
- Obongi
- Kazo
- Rwampara
- Kitagwenda
- Madi-Okollo

Karenga

Lusot

Do you have any customers from outside Uganda?

Yes

No

Which countries are they?

What untapped opportunities exist in the fish feed value chain?

What challenges do you encounter in the fish value chain?

Suggest the solutions to the challenges

FISH FEED TRADERS/STOCKISTS - DISTRIBUTION

» Location

District _____

Sub County/Town Council/Municipality

Parish/Ward/Division _____

Cell/Village _____

In which year did you start trading in fish feeds?

Where do you buy the fish feeds?

What is the brand name of the feeds that you trade in?

What type of feeds do you trade in?

Powder

Crumble

Pellet

Others

If others, please specify the type of feeds

What is the nutritional content of the various feed types?

On average, how much fish feeds do you sell in a year?

What is the selling price of the feeds?

Who are the different categories of customers of your fish feeds?

What are your distribution channels/network of your fish feeds?

Which districts do your customers mainly come from?

- Abim
- Adjumani
- Agago
- Alebtong
- Amolatar
- Amuria
- Amuru
- Apac
- Arua
- Bududa
- Budaka
- Bugiri
- Bukwa
- Bulisa
- Bundibugyo
- Bushenyi
- Busia
- Butalenja
- Dokolo
- Gulu
- Hoima
- Ibanda
- Iganga
- Jinja
- Kaabong
- Kabale
- Kabarole
- Kaberamaido
- Isingiro
- Kalangala
- Kaliro
- Kampala

- Kamuli
- Kamwenge
- Kanungu
- Kapchorwa
- Kasese
- Katakwi
- Kayunga
- Kibaale
- Kiboga
- Kiruhura
- Kisoro
- Kitgum
- Koboko
- Kotido
- Kumi
- Kyenjojo
- Lira
- Luwero
- Maracha
- Masaka
- Masindi
- Mayunge
- Mbale
- Mbarara
- Mityana
- Moroto
- Moyo
- Mpigi
- Mubende
- Mukono
- Nakapiripirit
- Nakaseke
- Nakasongola
- Namutumba

- Nebbi
- Ntungamo
- Oyam
- Pader
- Pallisa
- Rakai
- Rukungiri
- Sembabule
- Sironko
- Soroti
- Tororo
- Wakiso
- Yumbe
- Agago
- Alebtong
- Amudat
- Buhweju
- Buikwe
- Bukedea
- Bukomasimbi
- Bulambuli
- Butambala
- Buvuma
- Buyende
- Gomba
- Kalungu
- Kibuku
- Kiryandongo
- Kole
- Kween
- Kyankwazi
- Kyegegwa
- Lamwo
- Luuka

- Lwengo
- Lyantonde
- Manafwa
- Mitooma
- Namayingo
- Napak
- Ngora
- Nwoya
- Otuke
- Rubirizi
- Serere
- Sheema
- Zombo
- Kagadi
- Kakumiro
- Omoro
- Rubanda
- Namisindwa
- Pakwach
- Butebo
- Rukiga
- Kyotera
- Bunyangabu
- Nabilatuk
- Bugweri
- Kasanda
- Kwanja
- Kapelebyong
- Kikuube
- Obongi
- Kazo
- Rwampara
- Kitagwenda
- Madi-Okollo

Karenga

Lusot

Do you get customers from outside Uganda?

Yes

No

What countries outside Uganda do your customers come from?

What untapped opportunities exist in the fish value chain?

What challenges do you encounter in fish value chain?

Suggest solutions to address the challenges

EXTENSION WORKERS

Do you have any private extension workers working in the district?

Yes

No

Do not know

How many are they?

How many are male?

How many are female?

How many fish farming households do you have in the district?

How many ponds do you have in the district?

What is the estimated total pond area (m2)?

What is the estimated annual total fish (aquaculture) production?

What type of feeds are used by the farmers?

- Certified commercial feed (Produced in Uganda and imported)
- Informal SMEs and cottage feed producers or importers
- Produced on-farm
- Household/domestic organic waste

How do the fish farmers access the fish feed?

What are the 5 most challenges faced by fish farmers in your district?

What is your opinion about fish feed output in the district?

What is your opinion about fish feed quality in the district?

What is your opinion about fish feed reliability in the district?

Suggest solutions to addressing fish feed related challenges

What is the role of Fisheries Extension Workers (Government and Private) in fish feed production, marketing and utilisation?

Which negative environmental effects arise from fish feed production and usage?

What is the level of women and youths involvement in fish production, marketing and utilisation?

Which opportunities exist for women and youths in the fish production, marketing and utilisation?

AGRONOMICS OF PRODUCTION OF FEED INGREDIENTS

What of these crops do you produce?

- Maize
- Soya
- Sun Flower
- Cotton
- Sorghum
- Millet

- Cassava
- Wheat
- Barley
- Rice
- Groundnuts
- Others (Specify)

If others, please specify the other crops that you produce

What is your estimated yearly production (kg) of maize?

What proportion of the maize is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of maize?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the maize?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of soya?

What proportion of the soya is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%

0%

How long have you been in the production of soya?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the soya?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of Sun Flower?

What proportion of the sunflower is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of surflower?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the Sunflower?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of cotton?

What proportion of the cotton is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of surflower?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the Cotton?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of Sorghum?

What proportion of the sorghum is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of Sorghum?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the Sorghum?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of millet?

What proportion of the millet is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of millet?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the Sorghum?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of cassava?

What proportion of the cassava is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of cassava?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the cassava?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of wheat?

What proportion of the wheat is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of wheat?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the wheat?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of barley?

What proportion of the barley is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of barley?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the barley?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of rice?

What proportion of the rice is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of barley?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the rice?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of groundnuts?

What proportion of the groundnut is used or processed for home consumption?

- Greater than 70%
- Greaterthan50%to70%
- Greaterthan30%to50%
- Less than 30%
- 0%

How long have you been in the production of groundnuts?

- 1 - 2years
- 3 - 5years
- 6 - 10 years
- More than 10 years

On how much land do you grow the groundnut?

- Less than or equal to 1 acre
- 2 - 3 acres
- 4 - 10 acres
- Greater than 10 acres

What is your estimated yearly production (kg) of the others?

What proportion of the other crops is used or processed for home consumption?

e.g. palm trees - greater than 70%, sweet potatoes - 0% etc.

How long have you been in the production of other crops?

On how much land do you grow the the other crops mentioned above?

How much more extra land do you have that you can put to the increased production of the above mentioned crops?

- None
- 1 - 2acres
- 3 - 5acres
- 6 - 10 acres
- Over 10 acres

Which of the following agronomic practices/ technologies do you use more often in your farming of the above listed crops?

- Improved seed
- Inorganic fertilizers
- Organic fertilizers
- Herbicides
- Pesticides
- Water conservation (water trenches in the garden)
- Soil erosion control (mulching, contour strips etc.)
- Nutrient conservation (timeliness of planting, weeding)
- Irrigation
- Others (Specify)
- None

If others, please specify the agronomic practices/ technologies do you use more often in your farming of the above listed crops

Where do you get your farm inputs (seeds, fertilisers, etc.)?

- I buy from agro input shops
- From other farmers
- From own seed bank
- From government programs
- Others (specify)

If others, please specify the source of the farm inputs

Do you produce the crops for selling?

- Yes
- No

If you produce for selling, how do you find market for your produce)?*market access*

- I wait for buyers from home
- I call specific buyers to come and pick the produce
- I take produce to the buying centres near me
- I sell to our association or group
- Other (specify)

If others, please specify how you find the market for the produce

Who is your biggest buyer?

- Local producer buyers
- Local produce stores
- Moving buyers with lorries
- Large stores in trading centres
- Millers
- Feed processors
- Large producer buyers and exporters
- Others

If others, please specify your biggest buyer

How do you handle your produce after harvest?

- Dry and sell
- Dry, clean and sell
- Dry, clean, store and wait for good price
- Dry, clean, and take to warehouse receipt system
- Others

If others, please specify how you handle the produce after harvest

At what production stage do you sell your produce?

- From garden to market
- Garden –short term storage-market
- Garden-long term storage –market

Are you aware of the existence of the need for ingredients for production of fish feed on the market?

Yes

No

Would you consider producing ingredients solely for purposes of selling to fish feeding ingredients suppliers or to fish feed producers?

Yes

No

If No, why would't you produce ingredients solely for purposes of selling to fish feeding ingredients suppliers or to fish feed producers

If you are provided with the fish feed market, how much MAIZE in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

Less than 100kg

100 - 500kg

>500 - 1000kg

Greater than 1000kg

If you are provided with the fish feed market, how much SOYA in terms of volume do think you can be able to produce in a year of the crops you are recurrently producing?

Less than 100kg

100 - 500kg

>500 - 1000kg

Greater than 1000kg

If you are provided with the fish feed market, how much SUNFLOWER in terms of volume do think you can be able to produce in a year of the crops you are recurrently producing?

Less than 100kg

100 - 500kg

>500 - 1000kg

Greater than 1000kg

If you are provided with the fish feed market, how much COTTON in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much SORGHUM in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much MILLET in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much CASSAVA in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much WHEAT in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much BARLEY in terms of volume do think you can be able to produce in a year of the crops you are recurrently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much RICE in terms of volume do think you can be able to produce in a year of the crops you are recurrently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much GROUNDNUTS in terms of volume do think you can be able to produce in a year of the crops you are currently producing?

- Less than 100kg
- 100 - 500kg
- >500 - 1000kg
- Greater than 1000kg

If you are provided with the fish feed market, how much of the OTHER CROPS in terms of volume do think you can be able to produce in a year of the crops you are recurrently producing?

If alternative or non-conventional crops are identified specifically for fish feed ingredients with guaranteed market, would you be in position to engage in production of those ingredients e.g. Leucaena and Mung bean)?

- Yes
- No

If yes, why would you in position to engage in production of those ingredients?

If no, why wouldn't you in position to engage in production of those ingredients?

How much land can you dedicate to the alternative crops?

- None
- 1 - 2 acres
- 3 - 5 acres
- 6 - 10 acres
- Over 10 acres

What assistance would you require to start producing alternative sources of ingredients?

- Knowledge on how to grow
- Seed
- Assurance of market
- Others (specify)

If others, please specify the assistance you would require**What is your limiting factors or constraints to increased production of the above mentioned crops?**

- Lack of market for the produce
- Lack of storage
- Low prices
- Pests and vermin
- Land for production
- Prolonged drought
- Excessive water
- Flooding
- Short rains
- Erratic weather
- Poor water supply
- Poor soil fertility
- Poor quality of inputs
- Lack of inputs(seed)
- No alternative uses or benefits of crops
- Others (specify)
- None

If others, please specify the limiting factors**POLICY: MAAIF-DiFR-DAMD, FINANCE/PLANNING, TRADE/INDUSTRY/COMMERCE****How many fish feed production factories exist in Uganda?****What is the geographical distribution of the fish feed production factories (Name and Location)?**

Provide the name and location e.g. Ugachick Fish Factory in Magyinje, Wakiso District, KARDC feed mill in Kajjansi, Wakiso District etc.

What types of statistics are available on fish feeds in your department?

How are the statistics on fish feed generated/collected?

In what ways do the current laws and policy prohibit women and youth involvement in the fish feed value chain?

- Too restrictive in terms of requirements.
- Too costly in implementing the requirements
- Do not guide and protect women and youth involvement in feed value chain.
- Allow for many unscrupulous players and actors in the feed value chain that limit women and youth participation.
- Others (Specify)

If others, please show the way the current laws and policy prohibit women and youth involvement in the fish feed value chain

What can be done to make the policies and regulations gender responsive?

- Review to include affirmative action and creation of space for women and youth involvement in the feed value chain.
- Provide for access to capital and training for women and youth.
- Create incentives for leading actors in the business of feed to enrol and support women and youth actors in the feed value chain.
- Improve the restriction against speculators and middlemen who take advantage of women and youth.
- Others (specify).

If others, please specify how to make the policies and regulations gender responsive

- Review to include affirmative action and creation of space for women and youth involvement in the feed value chain.
- Provide for access to capital and training for women and youth.
- Create incentives for leading actors in the business of feed to enrol and support women and youth actors in the feed value chain.
- Improve the restriction against speculators and middlemen who take advantage of women and youth.
- Others (specify).

If others, please specify how the policies and regulations can be made gender sensitive

What challenges are encountered in the collection of data on fish feeds in Uganda?

EMPLOYMENT DATA

How many employees (including yourself) do you have?

What is the AGE BRACKET of the employees (including yourself)?

- Below 18 Years
- 18 - 30 Years
- Above 30 Years

What are their employment terms?

- Permanent
- Temporary

How many MALES (below 18 years) are employed on a PERMANENT BASIS?

How many MALES (below 18 years) are employed on a TEMPORARY BASIS?

How many MALES (18 - 30 years) are employed on a PERMANENT BASIS?

How many MALES (18 - 30 years) are employed on a TEMPORARY BASIS?

How many MALES (Above 30 years) are employed on a PERMANENT BASIS?

How many MALES (Above 30 years) are employed on a TEMPORARY BASIS?

How many FEMALES (below 18) are employed on a PERMANENT BASIS?

How many FEMALES (Below 18 years) are employed on a TEMPORARY BASIS?

How many FEMALES (18 - 30 years) are employed on a PERMANENT BASIS?

How many FEMALES (Above 30 years) are employed on a PERMANENTBASIS?

HowmanyFEMALES(Above30years)areemployedonaTEMPORARYBASIS?

GPS Location

Take a GPS point in the place

latitude (x.y °)

longitude (x.y °)

altitude (m)

accuracy (m)



PICTORIAL

PHoto I

Click here to upload file. (< 10MB)

Photo II

Click here to upload file. (< 10MB)

PhotoIII

Click here to upload file. (< 10MB)

PhotoIV

Click here to upload file. (< 10MB)

Photo V

Click here to upload file. (< 10MB)

Photo VI

Click here to upload file. (< 10MB)

Photo VII

Click here to upload file. (< 10MB)

Photo VIII

Click here to upload file. (< 10MB)

Photo IX

Click here to upload file. (< 10MB)

Photo X

Click here to upload file. (< 10MB)

End Time

End of Interview

hh:mm
