DIST:_____ HH:_____

CRAYFISH FISHER LEVEL AWARENESS AND UTILISATION SURVEY

Objectives

- **Understand at individual level trapping, fishing, and utilisation practices and factors affecting them, as well as volumes harvested.**
- **Solicit fishers' perceptions and ideas for ways to manage it.**

PART A. INTERVIEW BACKGROUND

A1. Respondent's name: .....

A2. Mobile phone No: ……..……

A3. Respondent's code, HH: ……

A4. Province: .....

A5. District, DIST: ….....

A6. Village: ..... ….

A7. Village management committee (VMC) name: .....

A8. Fishing camp: ……

A9. GPS coordinates *(from the centre of the fishing camp, village if not in camp)*

a. Latitude: …….. b. Longitude: .....

A10. Interviewed by *(enumerator's name):* .....

A11. Date of interview: Day: …..……Month: .....Year: …..…..……

PART B HOUSEHOLD DEMOGRAPHICS AND ACCESS TO AMENITIES

B1. Main income generating activity *(see codes A)*: …….....

B2. Experience in fishing in years…….…….....

B3. What type of fish do you usually fish? (*1=Kapenta 2=other fish (tilapia, nchenga etc)*: ……..

B4. Age of the respondent in years: …….…….....

B5. Highest level of education attained *(see codes B)*: ….....

B6. How long have you lived in the area *(years)*: ……

DIST:_____ HH:_____

B7. Do you stay at your household's permanent dwelling place during fishing season? (*1=yes skip to B9 2=no)* ……

B8. If not,

a. Where is your household's main dwelling located in relation to your fishing season residence *(1= same village2=another village within district 3=different district)* ……

b. What is the distance from household's main dwelling to where you reside during fishing season? km…….. walking minutes ……..……..

B9. Do you live with your family at your fishing season residence? (*1=yes 2=no*) …….

B10. Total of household members currently residing with the respondent: .....

B10a. Number of household members aged 0 to 18 years? ……..……

B10b. Number of household members aged 18 to 35 years? ……..……

B10c. Number of household members aged 36-64 years? ……..……

B10d. Number of household members aged 65 years and above? ……..……

B11. How many of the household members contribute to your fishing activities? …….....

B12. How far is the local market (place you purchase food often)? ……..km ……..walking minutes.

B13. How far is your main supplier of fishing gear and materials? ……..km ……..walking minutes.

B14. Who do you sell fish to?*(see codes C)* ……..

B15. In what form do you mainly sell your fish? *(1=fresh 2=sun-dried 3=salted 4=other, specify*) ……

B15. How far is your main fish selling point from where you catch it, *enter '0' sold at source*?

…….……..km ……..walking minutes

Codes A (B1)	**Codes B (B5)**			**Codes C (B14)**
1=fishing *2=farming* *3=informal/business* *4= part-time labourer* *5=formal employment* *6=other)*	*00=None* *01=sub-standard A, Grade 1* *01=sub-standard A, Grade 1* *02=standard 1, Grade 2* *03=standard 2, Grade 3* *04=standard 3, Grade 4* *05=standard 4, Grade 5*	*06=standard 5, Grade 6* *07=standard 6, Grade 7* *08=form 1, Grade 8* *09=form 2, Grade 9* *10=form 3, Grade 10* *11=form 4, Grade 11* *12=form 5, Grade 12* *13=form 6 lower*	*13=form 6 lower* *14=form 6 upper* *15=College student* *16=Undergraduate student* *17=Certificate/Diploma* *18=Bachelor's degree* *19=Master's degree*	*1=directly to consumers* *2=wholesalers/retailers* *3=restaurants* *5 =other, specify……..*

PART C: Crayfish awareness

C1. Have you ever heard of crayfish? (*Enumerator please show the respondent the picture 1= yes 2=no, end interview)* …….

C2. What did you hear about it? ……

C3. Have you ever seen crayfish in a river/lake near you? (*1= yes 2=no skip to Part E)* ……

C4. Name of water body? River/lake: ……. District: …….

C5. When did you first see it? Month:…… Year:…….

C6. Do you still see it? (*1= yes skip to C5 in table 2=no)*

C7. If not, when did you last see it? Month:…… Year:…….

DIST:_____ HH:_____

PART D: Crayfish population dynamics and seasonality

Please answer the following questions based on the first year you saw/caught crayfish and the most recent sighting.

Reference spotting	Year *(enumerator, enter year based on C3 above)*	What type of water body did you spot them in? 1=river 2=lake 3=stream 4=other(specify)……	How often did you see it? 1=everyday 2=once a week 2=more than one time a week 3=once a month 4=less than once a month 5=less than 5 times a year	Months seen/caught the most *(enumerator, please tick the months mentioned)*												Months seen/caught the least (enumerator, please tick the months mentioned)												Months of no sightings (enumerator, please tick the months mentioned)											
D1	**D2**	**D3**	**D4**	**D5**												**D6**												**D7**											
Earliest sighting				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Most recent sighting				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

PART E Crayfish Utilization

E1. Do you eat crayfish? (*1= yes 2=No, skip to E4)*……

E2. How do you prepare it (*Codes C below)*?

E3. How do you consume it *(1=snack 2=main meal)*?.....

E4. Do you know anyone else who eats crayfish? (*1= yes 2=No, skip to E6)*……

E5. If yes, who? *(Codes D)* ……..

E6. Is anyone selling crayfish in your area? (*1= yes 2=No, skip to E10)*……

E7. If yes, who are they selling to?*(Codes E)* …….

Codes C (E2)	**Codes D (E5)**	**Codes E (E7)**
1=cooked alone as the main protein *2= combined with other fish* *2=mixed into vegetables/groundnuts/other nonfish protein*	1= young local villagers 2= old local villagers 3=young Zambians in nearby town 4=old Zambians in nearby town 5=young Zambians in Lusaka and other big towns 6=old Zambians in Lusaka and other big towns 7=Expatriate Chinese 8=Expatriate others 9=chidren 10=Men 11=Women	*1=directly to local consumers* *2=local wholesalers/retailers* *3=local restaurants* *4=directly to out of town consumers* *5=out of town wholesalers/retailers* *6=out of town restaurants* *7 =other, specify……..*

DIST:_____ HH:_____

E8. Have you ever caught crayfish intentionally (main catch)? (*yes=1, no=2*) ……..
E9. Have you ever caught crayfish unintentionally (bycatch)? (*yes=1 skip to E11 , no=2*) …….
E10. If caught as a bycatch (unintended catch), what type of gear do you catch the crayfish with? (*1=Kapenta 2=other fish (tilapia, nchenga etc)* ……..

Crayfish catch category	How frequently do you catch crayfish as ……? Units 1. At least once daily 2. once a week 3. more than once a week 4. other specify …..	Quantity per catch Units 1. kgs 2. 5liter tin 3. 20 liter bucket 4. 50 kg bag 5. other (specify and indicate in side note closest conversion) ……..	How many units? At low season	At low season	What type of fishing gear do you use when you catch the crayfish? 1. homemade traps 2. purchased traps 3. gill fishing nets 4. mosquito nets 5. Kapenta nets 6. other (specify) ……	How do you use the crayfish caught 1= sell 2= home consumption 3=give away to others 4=dispose(throw away) 5= other uses, specify ……	If sold, price per unit ZMW	Unit
E11	**E12**	**E13**	**E14**	**E15**	**E16**	**E17**	**E18**	**E19**
a. Main Catch								
b. Bycatch								

Part F: Perceptions and impacts of crayfish

F1. How did you view crayfish the first time you saw/heard of/caught it?*(Codes G)* …….

F2. How do you now view crayfish? *(Codes G)*……..

F3. Have you seen crayfish being attacked/eaten by other fish or animals in the area? (*yes=1, no=2 skip to F5*) ……..

F4. If yes, what attacks the crayfish? *(see codes G)* …….

F5. What do you think should be done about the crayfish in the waterbodies in your area? *(1=nothing skip to F9 2=removed)* …….

F6. Would you be willing to participate in the removal as a volunteer? *(1=yes 2=No)* ……

F7. Would you be willing to contribute (money or in kind) to have them removed? *(1=yes 2=No skip to F9)* ……

F8. What would be the most you would contribute? (if in-kind, please probe on the value of what they are willing to give as contribution) ZMW…….

Codes G (F1, F2)	**Codes H(F4)**
1=nuisance/useless 2=useful as food 3= useful as a source of income 4=threat to fishing livelihood 5=threat to environment	*1=Fish* *2=Animals, specify type……..* *3Other, specify……*

F10. Please mention and rank the 5 main challenges to your fishing activities.

Issue	Rank *(1 for most challenging, 5 least challenging)*
F10a	**F10b**

F11. Have you experienced any damage to fishing gear or fish due to crayfish?*(1=yes 2=No skip to G1)* ……

Type of damage to fishing gear	Extent of damage (1=total, not repairable 2=partial damage, repairable)	Is the damage repairable?	If repairable,		If not repairable	
			How often do you repair? *1=every incident 2=after more than one incident*	How much does it cost to repair? ZMW	How often do you replace them? *1=every incident 2=after more than one incident*	Cost of replacement (ZMW)
F12	F13	F14	F15	F15	F16	F17

Type of damage to fish	Fish species 1. Breams/tilapia 2. Buka buka 3. Kapenta 4. other (specify) ……	Extent of damage 1. Extensive, cannot even be consumed 2. Almost extensive, can be consumed but not sold 3. Moderate, can be consumed but not sold 4. Mild, can be sold 5. Minimal	How much fish gets damaged per catch?		
			Enter kgs damaged per catch	Enter proportion in percent per catch (100% if all the fish in catch gets damaged)	Value of fish lost in ZMW per year
F18	F19	F20	F21	F22	F23

Part G: Historical trends

Attribute	What has been the trend in crayfish …… from the first year? *1=Stayed same* *2=Increased slightly* *3=Increased greatly* *4=Reduced slightly* *5=Reduced greatly*	Reason
G1	G2	G3
1. Sighting		
2. Size of crayfish		
3. Quantity of main harvest		
4. Quantity of bycatch		
5. Consumption		
6. Sales		
7. Damage to fish		
8. Damage to fishing gear		