



## General conduct during the interview

#### Respondent:

- Get the respondent's consent before proceeding with the interview.
- The respondent for this survey should be the person on the farm who carries out day-to-day management of the fish.
- If the respondent is a different person from the owner:
  - First collect information from the respondent using the cross sectional survey tool.
  - After completing the cross-sectional survey tool, follow up with the owner in person or by phone using the owner information survey tool.
- For every visit, collect data from the same respondent.

#### **Survey questions**:

- Enumerators should be familiar with all questions in the survey tool
- **Do not read answer options or prompt** the respondents allow them to provide answers, then select the most suitable option
- Save frequently to prevent loss of data.



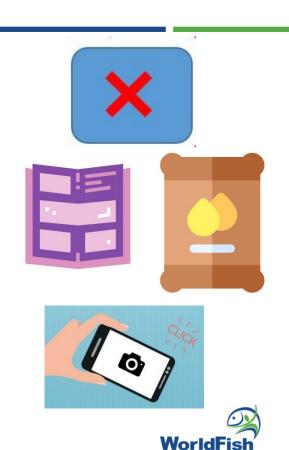




## General conduct during the interview

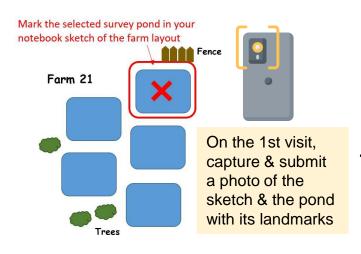
#### **Pond inputs:**

- Always ensure that you collect information from the same selected pond.
- When enquiring about the types of different inputs used on the pond, always ask the respondent to choose from list in the photobook..
- A jute bag/bin should be provided to the farm on the 1st visit & used on subsequent visits to collect packaging of used products.
  - Collect & note down the type of product packaging found in the jute bag/bin for that farm.
  - Empty the jute bag/bin at the end of each interview so that it can be used to collect packaging for next 2 weeks.
- For each visit, take photos of all products used at the farm for the past 2 weeks but are not listed in the photobook.
  - Fertilizers, feeds, treatments, non-commercial medicines (including traditional medicines), growth promoters & probiotics





#### **Written information**



Your **notebooks** should contain **written information** on the following:

- The list of farms (& their farm codes) assigned to you
- Your preplanned schedule of farm visits (dates of visits)
- List of Survey Pond IDs
- How to locate the surveyed ponds (& landmarks) for future visits.
- Sketch of each farm's total pond layout & the selected survey pond (marked with an 'X' etc.)
- Current production stage & production activities already carried out on the selected pond in previous visits.
- Other miscellaneous important information (types of fish produced etc)

Use the above written information & background knowledge from previous visits so that you are able to cross check with the respondent & inform the team leader about **the pond's production activities** & incidences

## **Capturing photos**

Remember to capture & submit photos of:

- 1) The pond sketch
- 2) The surveyed **pond and its surrounding landmarks** as a reference
- 3) All input products not listed in the photobook fertilizers, feeds, treatments, non-commercial medicines (including traditional medicines), growth promoters, probiotics & chemicals presented by the respondent or found in the jute bags/bins





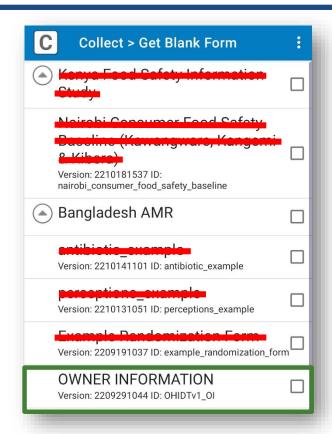
### Survey tool selection

The following survey tools will be available for download to your mobile device:

- ☐ 'Cross sectional survey tool' consisting of :
  - > Retrospective survey:
    - Section A-C: Enumerator & respondent information
    - Section D-J: Farm-level questions
    - Section K-W: Pond-level questions
  - Longitudinal survey (day zero): current production cycle
- Owner information survey tool
- ☐ Follow up longitudinal survey tool
- □ Farmer perception survey tool



## Survey tool selection



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Toggle All	Refresh	Get Selected



## Survey tool selection – 1<sup>st</sup> visit

Which tool?	Submission
Cross- sectional tool	1 <sup>st</sup> submission (1x)
*Owner information tool	Submitted 1x after completing cross sectional interview *only if survey respondent is not the farm owner

1st visit



## Survey tool selection – 2<sup>nd</sup> visit

Which tool?	Submission
Farmer perceptions tool	Submitted 1x after completing follow-up longitudinal interview on 2 <sup>nd</sup> visit *only if farm declared use of treatments in cross sectional survey
Longitudinal tool	2 <sup>nd</sup> submission 3 <sup>rd</sup> submission 4 <sup>th</sup> submission  until last submission

2<sup>nd</sup> visit



## Survey tool selection – 3<sup>rd</sup> visit

Which	Submission
tool?	
Longitudinal tool	2 <sup>nd</sup> submission 3 <sup>rd</sup> submission 4 <sup>th</sup> submission 
	until last submission

3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> ... until last visit



## How to collect data for the cross-sectional survey tool

#### **Retrospective survey**

The first part titled 'Retrospective survey' is for retrospective information from the last/most recently completed production cycle & consists of two levels of questions:

- 'Farm-level' questions asking about the enumerator & respondent (Section A-C) & the farm as a whole (Section D-J)
- 2. 'Pond-level' questions asking about the most recently completed production cycle for one selected pond (Section K-W)

#### Section A-C:

Enumerator & respondent information

► Section A:

General survey information

► Section B:

**Enumerator information** 

► Section C:

Respondent information

► Section D:

**Awareness** 

#### Section D-J:

**Farm-level questions** 

► Section E:

Farm layout & worker information

► Section F:

General farming system information

Section G:

Farm practices: Water source & management

► Section H:

Farm practices: Biosecurity

► Section I:

Farm practices: Effluent discharge

► Section J:

Farm practices: Pond sludge

removal

## How to collect data for the cross-sectional survey tool

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- 'Farm-level' questions asking about the enumerator & respondent (Section A-C) & the farm as a whole (Section D-J)
- 'Pond-level' questions asking about the most recently completed production cycle for one selected pond (Section K-W)

#### Section K-W: Pond-level questions

► Section K:

Farm practices: Fish stocking

► Section L:

Farm practices: Feeding

► Section M:

Farm practices: Fertilizers

► Section N:

Farm practices: Harvesting

► Section O:

Clinical signs

► Section P:

Mortality

Section Q:

Response to mortality:

Reporting

► Section R:

Response to mortality:

Animal health services

► Section S:

Treatments (for prevention

& treatment of disease)

Section T:

Administering treatments

► Section U: Economics:

Production

## How to collect data for the current production cycle (longitudinal survey Day Zero)

#### **Longitudinal survey (Day Zero)**

The final section titled 'Longitudinal survey (Day zero)' is for collecting data from the current production cycle on the selected pond:

- ❖ If the current production stage of the selected pond fulfils the criteria of active farming, then this part of the survey (Longitudinal survey (day zero)) should be carried out immediately after completing the retrospective survey.
- \*Criteria: Pond should not be in harvesting stage/post harvest & should be in active farming stages (pond preparation at the start of the production cycle, stocking, grow-out)
- ❖ Ensure that the information in the 'longitudinal survey (day zero): current production cycle' section is taken from the same pond (Survey Pond ID) selected at the beginning of the cross-sectional survey.



# How to use the Final section: Longitudinal survey (Day Zero)

#### Final Section: Longitudinal survey (Day Zero)

- On the 1<sup>st</sup> visit at the end of the cross sectional survey, collect data for the current production cycle under the <u>Final Section: Longitudinal</u> <u>survey (Day Zero)</u>.
- Confirm & select the current production stage of the selected pond to display relevant questions for that production stage.

#### Final section:

#### Longitudinal survey (Day Zero)

- ▶ Pond preparation
- Fish stocking
- **▶** Feeding
- ► Fertilizers
- ► Harvesting
- ► Clinical signs
- ► Mortality
- ► Treatments (for prevention & treatment of disease)
- ► Economics: Production



### How to use the Follow-up longitudinal survey tool

- After the 1<sup>st</sup> visit for the cross sectional survey, use the follow-up longitudinal survey tool (from the 2<sup>nd</sup> visit onward) to collect data for the <u>current</u> <u>production cycle</u>.
- The follow-up longitudinal survey needs to be downloaded as a separate tool & one form needs to be submitted per every follow up visit to the farm using the same tool.
- Confirm & select the current production stage of the selected pond to display relevant questions for that production stage.

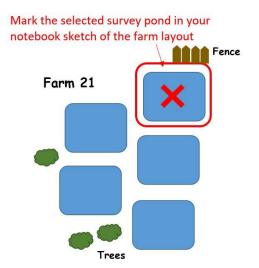
## Follow-up longitudinal survey tool

- ▶ Pond preparation
- ► Water exchange
- ► Effluent release
- ▶ Pond sludge removal
- ► Fish stocking
- ▶ Feeding
- **▶** Fertilizers
- ► Harvesting
- ► Clinical signs
- ▶ Mortality
- ► Treatments (for prevention & treatment of disease)
- ▶ Economics: Production



#### Pond selection criteria

- For the longitudinal survey, information must be collected from the same pond that was surveyed in the cross-sectional study
- Write down the survey pond ID and make notes on how to locate & identify the selected pond.
- Be aware which questions refer to the pond or farm level.



## Take a photo of the selected pond & its landmarks

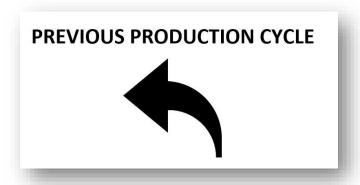


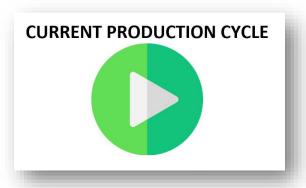


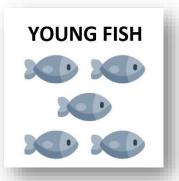
#### Pond selection criteria

The pond selected for the survey should:

- 1) have been used for production in the last completed cycle
- 2) still be in use during the current production cycle
- 3) have the youngest stock of fish in the current production cycle













How to get the Survey Pond ID for this question?
See the following slides...

RETROSPECTIVE SURVEY > E. FARM LAYOUT & WORKER INFORMATION

The selected pond is number 3

Using the above selected number, key in the Survey Pond ID here using the farm code name and the randomly selected number

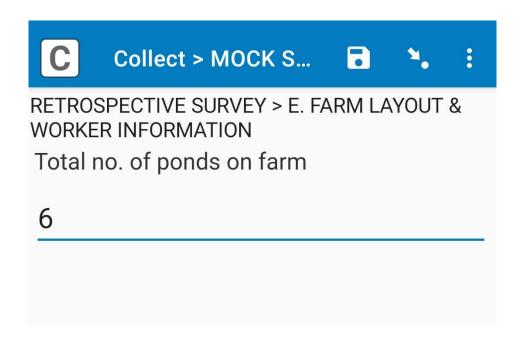
#### Example:

'M21\_5' can be used to identify the fish farm (with farm identification code 'M21' from the list of farms provided by the team leader) and pond number 5 from the random selection above

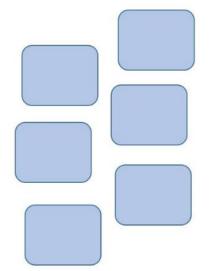
Hint: The Pond ID is an identifier representing the farm code number and the pond used for the survey

M21\_3





Sketch the layout of ponds at the farm

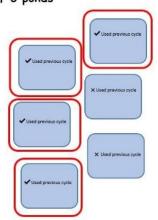




In your notebook, sketch the layout of all ponds in the farm. Ask the respondent to think of all the ponds that were used in the most recent cycle/season, and draw a circle around those ponds in the sketch.

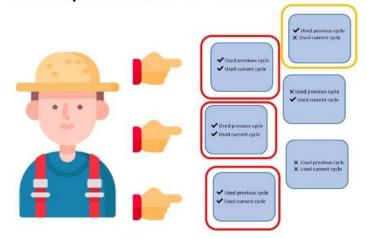
1

Circle the number of ponds used in the most recently completed (previous) production cycle = 4 of 6 ponds



Ask: Which of these circled/highlighted ponds have been stocked within the past two weeks or will be stocked within two weeks from now?

Indicate which of the circled ponds is currently stocked/to be stocked in 2 weeks



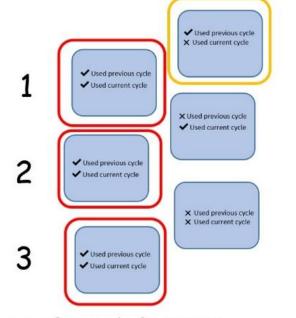
Number these ponds, then enter the maximum number here.

#### Example:

If there are 5 ponds that meet the criteria above (ponds used in previous cycle and stocked in the past 2 weeks/next 2 weeks), number those ponds (1-5) in the sketch and key in number 5 here.

3

Count the ponds that match criteria (used both in previous/current cycle)



e.g. if 3 ponds fit criteria, enter number 3

## **Keying in the Survey Pond ID**

For the subsequent question on **Survey Pond ID**:

The Pond ID is an identifier representing the farm code number and the randomly generated pond ID of the pond selected for the survey

#### Example:

- 1. Pond number <u>3</u> is generated from the random selection example above.
- 2. Identify the <u>'farm identification code'</u> of the farm you are visiting e.g. 'M21' from the list of farms provided by the team leader
- 3. Key in the Survey Pond ID as '[farm code]\_[randomly selected pond ID]' e.g. M21\_3

#### Important note:

 Write down & remember the selected Survey Pond ID – you will need to key in this Survey Pond ID & refer to the same pond for all follow-up longitudinal surveys at the same farm. RETROSPECTIVE SURVEY > E. FARM LAYOUT & WORKER INFORMATION

The selected pond is number 3

Using the above selected number, key in the Survey Pond ID here using the farm code name and the randomly selected number

#### Example:

'M21\_5' can be used to identify the fish farm (with farm identification code 'M21' from the list of farms provided by the team leader) and pond number 5 from the random selection above

Hint: The Pond ID is an identifier representing the farm code number and the pond used for

the survey

M21\_3



## Farm input products listed in the photobook

- When asking about input products used at the farm (feed, fertilizer, treatments, growth promoters/probiotics/supplements), always ask the respondent to look at the photobook first.
- Key in the codename provided for that product in the photobook for the relevant questions

#### Example: What is the name of treatment 1,2,3...?

- 1. Look for the name/picture of the product named by the farmer
- 2. Product name is Aquafeed Pro, listed codename = FD1
- 3. Key in FD1 as the answer.











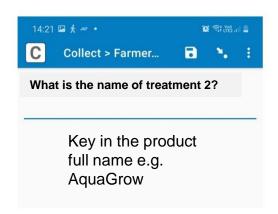
### Farm input products not listed in the photobook

## For products that are <u>not listed in the photobook</u>:

- Key in the full brand name of the product
- Take a photo of the packaging of the unlisted product and submit it in the survey. Ensure that the photo resolution is good enough to read the label.
- Post survey (within 2 weeks), enumerators need to investigate the unlisted product e.g. brand, formulation, manufacturer to update the photobook for follow up interviews





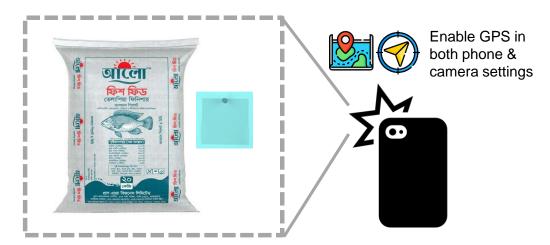




## Farm input products not listed in the photobook

In order to differentiate photos of different farm input products, use the following colour coded cards (one set will be provided to each visiting team) by placing them beside the product package when taking the photo:

- ☐ Red card For growth promoters/probiotics/supplements
- Blue card For commercial feed
- Green card For fertilizers
- ☐ Yellow card For treatment products (used for prevention & treatment of disease)
- ☐ White card For other packaged products not mentioned above (disinfectants, unknowns etc)





## Capturing & organizing survey photos

When taking any survey photo, remember to:

- 1.Exit the SurveyCTO app to take the photo using the mobile device camera.
- 2.Return to the survey question in the app & submit the relevant photos from the Gallery.

Outside of the survey tool, all survey photos from the mobile device gallery should be organized into subfolders according to farm code & date of survey visit e.g. M21\_20221030\_E1

The folders containing the survey photos should be copied:

- ▶To a central team computer using a USB cable
- ▶To a shared cloud drive specifically for survey photos



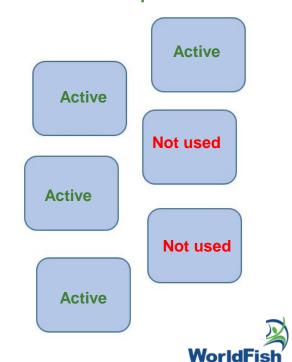
## Calculating pond-level costs & quantities

For all questions on costs and quantity, if the farmer only knows the total cost at the farm level, work with them to estimate the quantity/cost for the selected pond - Calculate the estimated pond cost/quantity based on the number of ponds and their relative sizes.

## Example: How much fertilizer did you apply in the selected pond? (in kg)

- 1. Get the total farm cost for fertilizer e.g. 1000 taka
- 2. Get the number of <u>active ponds</u> at the farm e.g. 4 <u>active</u> ponds in total.
- 3. If ponds are about the same size, divide the total farm cost 1000 / 4 ponds = ~ 250 taka per pond.
- 4. Key in 250 taka for the selected pond.\*Pond cost may be double if size is 2x larger

Farmer says he spent 1000 taka across the whole farm ÷ 4 active ponds



## Calculating pond-level costs & quantities

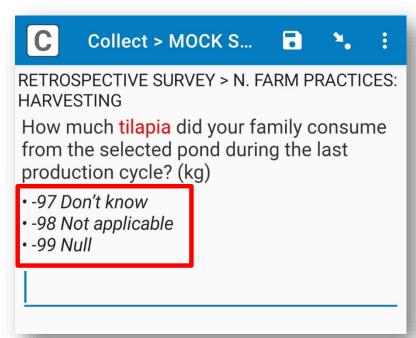
The sections in the survey that involve possible pond-level calculations of farm input product quantity are:

- ▶ Section L: Farm practices: Feeding
- ▶ Section M: Farm practices: Fertilizers
- ▶ Section S: Treatments

(for prevention & treatment of disease)

#### Remember:

►For all questions requiring entries on costs or quantities, you are discouraged to enter the number 0; Instead, use the codes provided to indicate a non-value.



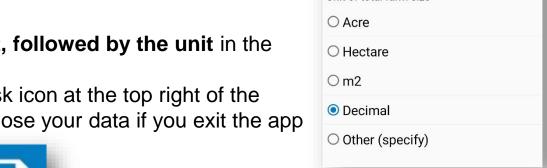
## Calculating pond-level costs & quantities

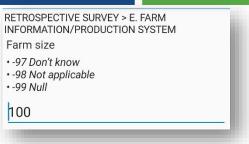
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- ▶ Section L: Farm practices: Feeding
- ▶ Section M: Farm practices: Fertilizers
- ▶ Section S: Treatments (for prevention & treatment of disease)

#### Remember:

- ► Key in the numerical value first, followed by the unit in the next question.
- ► Save often by tapping on the disk icon at the top right of the mobile screen, so that you do not lose your data if you exit the app





RETROSPECTIVE SURVEY > E. FARM INFORMATION/PRODUCTION SYSTEM

Unit of total farm size



In the first question under the farmer perception module, a list of treatment products previously reported in the cross sectional survey may be displayed. Ask the farmer if there will be any changes if he stops using those products

The last time that I visited, you mentioned that you used the following medicines either to prevent sickness or to promote growth in your animals:

#### **ANTIBIOTIC LIST**

Product A
Product B
Product C

...

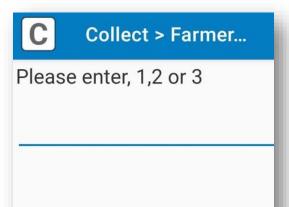
(continued)



For the 3 last questions in this module, you will also be asked to enter any random number between 1-3.

After you choose a number (1/2/3):

- The X value in the second last question will be a random generated value (= 5%/10%/15%) that will depend on the random number that you entered (1/2/3).
- In the last question, the Y value will depend on the X value in the previous question.



Would you be willing to let us test your fish in return for a payment of **X**% of your production value if no medicine is detected?

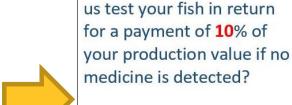
Would you be willing to let us test your fish in return for a payment of **Y**%?



If 'YES' was previously selected for testing of fish for payment of X% of production value, then Y may be displayed as a <u>SMALLER</u> percentage in the question.

#### Example:

If '**YES**' selected for payment of X%, then Y may be displayed as 5% less than X.



#### YES

Would you be willing to let us test your fish in return for a payment of **5**%?

Would you be willing to let



If 'NO' was previously selected for testing of fish for payment of X% of production value, then Y may be displayed as a BIGGER percentage in the question.

#### Example:

If 'NO' selected for payment of X%, then Y may be displayed as 5% more than X.



Would you be willing to let us test your fish in return for a payment of **10**% of your production value if no medicine is detected?

#### NO

Would you be willing to let us test your fish in return for a payment of **15**%?



## **Thank You**

