

MANUAL OF INSTRUCTIONS

MONTHLY COMMERCIAL FISHERIES SURVEY

I. INTRODUCTION

A. The Survey

The Monthly Commercial Fisheries Survey is a statistical inquiry on commercial fishing that is conducted on an every other day frequency. Contractual Data Collectors (CDCs) are hired to conduct the survey of fishing boats that are landing/unloading at the sample fish landing centers.

Data are gathered through actual interviews of respondents during peak unloading hours using a structured questionnaire prepared at the Central Office. The target respondents are fisherman, operator, captain or knowledgeable crew of the unloading or landing fishing boat.

B. Objectives

The general objective of the activity is to generate information on the monthly volume of fish catch by fishing ground, tonnage class, fishing gear and species at the provincial, regional and national levels.

The specific objectives are to generate estimates on the following:

- a. quantity and value of fish catch from the commercial fisheries sub-sector;
- b. volume and value of commercial fish catch by region by province;
- c. quantity of commercial fish catch by fishing ground, fishing gear and species;
- d. fish catch by tonnage class for Commercial Fishing and,
- e. data on fishing effort.

C. DEFINITION OF TERMS

The following are terms used in this manual:

- 1. Fishing, Commercial** - the catching of fish with the use of fishing boats with a capacity of more than three (3) gross tons for trade, business or profit beyond subsistence or sport fishing.
- 2. Landing Center** - place where fish catch and other aquatic products are unloaded and traded.
- 3. Fish Carrier** - boat/vessel that carries or buys fish from fishing ground and brings them to the landing center.
- 4. Fishing Gear** - any instrument or device and its accessories utilized in taking fish and other fishery species.
- 5. Fishing effort** - the unit exerted in catching fish, e.g., number of trips, number of fishing days, and number of hauls made during the fishing operation.
- 6. Fishing Grounds** - areas in any body of water where fish and other aquatic resources congregate and become target of capture.
- 7. Payaw** - any construction, either floating/drifted or anchored to attract and aggregate fish for harvest using various types of fishing gears.
- 8. Light** - a device for attracting school of fish using coleman, petromax, incandescent or super lights.
- 9. Payaw/free school** - uses any fishing gear for simultaneously catching fish from payaw and school of fish in the open sea.
- 10. Free school (kawan)-** a natural school of fish without any concentrating or attracting device.
- 11. Fishing Boat** - type of watercraft, such as motorized/non-motorized banca, sailboat, motor boat, etc., either licensed or not, used for fishing purposes.
- 12. Fish Catch** - volume of fish caught from commercial fishing activities.

D. METHODOLOGY

1. Sampling Frame

The sampling frame used are the lists of fish landing centers by province updated as of 2007.

2. Sampling Design

The survey utilizes a stratified random sampling with the province as the domain. The average volume of unloadings per day is the variable used in the stratification of the fish landing centers into three (3) groups, namely;

Stratum 1 . the top producing fish landing center in the province;

Stratum 2 . the major producing fish landing centers; and,

Stratum 3 . all the other fish landing centers.

3. Sample size

For year 2009, there are 59 provinces with Commercial fishing operations. Sample size varies by region, by province depending on the availability of funds to cover wages of CDCs.

The target sample size for 2009 is 110 landing centers distributed nationwide.

D. GENERAL REMINDERS

1. Conduct a training of Data Collectors on the conduct of the survey.
2. Provide forms for Contract of Services to the hired Data Collectors and submit the accomplished contracts to the Central Office immediately (Attachment 1).
3. Conduct the survey in the sample fish landing centers on an every other day frequency. Sample Fish Landing Centers are in Attachment 2.
4. Enumerate all fishing boats landing/unloading in all sample landing centers . In case the sample landing center has wide area, and unloading is done simultaneously such that complete enumeration would be very difficult if not impossible, a minimum of 15 sample fishing boats shall be enumerated but the enumerator is encouraged to list as many as he/she can enumerate by gear type. However, information on the total number of boats that unloaded by gear type should be obtained and must be indicated in Item E of **MCFS Form1** at the end of the survey day.
5. Cover all unloadings for the day. In case there are two (2) unloadings in a day, e.g., one in the morning and one in the afternoon, the Data Collector should conduct the survey twice. Separate forms should be used for each unloading time.

Inquiries should be made in case there are landing/unloadings outside the usual/identified unloading time/s. In which case, another separate sheet/form shall be used in recording such unloadings.

6. Include/List in the questionnaire catcher boats that landed with no catch in the landing center since these boats have information also on fishing effort. Exclude boats that landed but did not fish and merely docked in the landing center.
7. Submit narrative report on the vital factors or unusual phenomenon affecting the volume of catch/unloading in the landing center as well as the problems encountered during the survey month.
8. Submit all accomplished survey forms and summary sheets to the Fisheries Statistics Division after data encoding.

II. INSTRUCTIONS ON HOW TO ACCOMPLISH MONTHLY COMMERCIAL FISHERIES SURVEY FORM 1 (MCFS Form1)

MONTHLY COMMERCIAL FISHERIES SURVEY FORM 1 (MCFS Form 1) - Monthly Commercial Fisheries Survey is **one page** listing sheet type of form (Attachment 3). It contains seven (7) blocks, namely :

1. BLOCK A - GENERAL INFORMATION
2. BLOCK B - BOAT INFORMATION
3. BLOCK C - FISHING EFFORT
4. BLOCK D - FISH CATCH
5. BLOCK E - SUMMARY OF LANDINGS/
UNLOADINGS FOR THE DAY BY GEAR TYPE
6. BLOCK F - TOTAL FISH CATCH FOR THE DAY
7. BLOCK G - REMARKS

One form is intended for several boats. If a fishing boat unloaded several species or a fish carrier served more than one mother boat, use one line per mother boat-species combination and use more forms as needed.

Page ____ of ____ pages

At the upper right hand corner of the questionnaire, number the pages consecutively on the first blank space provided and on the second space, indicate the total number of pages used for one data collection day in a sample landing center. Summarize the unloadings in a day on the first page

Survey Month - Write the month when the survey is conducted.

A. GENERAL INFORMATION

This block asks for information common to all the landing/unloading boats in the landing center.

Region

Write the region and enter the code in the boxes.

Province

Indicate the name of the province and enter the 2 . digit provincial code on the boxes provided.

Landing Center

Write the complete name of the sample landing center and enter its corresponding 5 . digit code on the boxes.

Stratum or Landing Center Classification

Encircle code 1 if the sample landing center belongs to Stratum 1.

Encircle code 2 if the sample landing center belongs to Stratum 2.

Encircle code 3 if the sample landing center belongs to Stratum 3.

Date of Data Collection

Enter the 2 . digit code of the month, the date and the year the data was collected.

Unloading time

Unloading time refers to the usual time when fishing boats starts to unload their fish catch until the time of unloading of the last boat.

if there is only one unloading time in the landing center, ã

Encircle code %1+ to mean that the boats being listed in the questionnaire are those boats that unloaded within the specified unloading time.

If there are unloadings that took place outside the usual unloading time, encircle code %2+, record the information in a separate SCM Form 1.

if there are 2 separate unloadings in a day, ã .

Separate sheets should be used of each unloading time.

Encircle code %1+ if boats being listed in the questionnaire unloaded during the 1st unloading time specified.

Encircle code %2+ if boats being listed in the questionnaire are those that unloaded during the 2nd unloading time specified.

In case there are unloadings that took place outside the 1st and 2nd unloading times, use a separate sheets and encircle code %3+.

B. BOAT INFORMATION

This block asks for individual information on all the boats landing/unloading in the landing center.

Column 1 - Boat Number

Number the boats enumerated at the sample landing center consecutively.

Column 2 - Name of Fishing Boat

Indicate the names of the fishing boats that landed/unloaded fish catch at the landing center. In case a municipal fishing boat does not have a name, write the name of the owner instead.

Column 3 - Type of Boat (Write Code)

Write %1+ if boat is a catcher boat, otherwise, write %2+ to mean that the boat is a carrier.

Column 4 - If Carrier Boat

Write under this column the name(s) of the catcher boat(s) served by the carrier boat.

Column 5 - Tonnage class (Write Code)

For Commercial fishing boats only, Write the tonnage class code corresponding to the tonnage class of the fishing boat. (Code is found at the bottom of the questionnaire)

Column 6 - Type of Fishing Gear Used

Write the type of fishing gear used by the catcher boat for the fishing operation. If the boat is a carrier, fishing gear/s used by the catcher boat/s served should be reported. If a catcher boat used more than one type of gear, report only the major gear.

C. FISHING EFFORT

This block asks for information on the fishing effort of all catcher boats unloading in the landing center. This should be accomplished even if the mother boat was not able to catch any fish since effort was also exerted in the fishing operation.

If the boat is a fish carrier, information on the fishing effort of the catcher boat served by this carrier could be obtained from the captain/master fisherman of the carrier since a copy of the complete records of the catcher boat shall be provided to the owner upon arrival at the landing center.

Column 7 - Number of Crew

Enter under this column the number of crew of the catcher boat listed in either Column 2 or 4.

Column 8 - Number of Days for Searching Fish

Indicate the number of days spent for fishing per trip.

NOTE: Travel time from home port to fishing ground and from fishing ground to landing center should not be included in reporting the number of fishing hours/days in columns 8.

Column 9 - Total Number of Hauls

Enter under this column the total number of hauls made during the fishing operation. Number of hauls is the number of times the fishing gear was set, dropped and lifted. This question applies for net gears only.

D. FISH UNLOADINGS

This block asks for information on name of fishing ground where fish landed/unloaded were caught, volume and price of fish catch by species.

FISHING GROUND

Column 10 - Fishing Ground

Write under this column the name(s) of fishing ground(s) where the fish unloaded were caught.

Column 11 - Device Used (Write code)

- | | |
|---------------------------|---------------|
| 1 - Payaw | 2 - Light |
| 3 - Payaw and Free School | 4 - No Device |

Write the code/s corresponding to the source of catch unloaded. Multiple answer is accepted.

Column 12 - Species

Write under this column all kinds of species unloaded by the fishing boat. If assorted, allocate all fish catch unloaded among the dominant species. Coding of species shall be done during editing process.

Column 13 - Quantity in Local Unit

Enter under this column the quantity in local unit of each species identified in Column 12.

Column 14 - Name of Local Unit

Write the name of local unit used, e.g., bañera, box, styrofoam, etc. Write kg. if the answer is in kilograms.

Column 15 - Weight of One Local Unit in Kilogram

Enter under this column the weight in kilogram of the local unit reported in Column 14. If in kilogram write **1**.

If there are different sizes of fish, ask the total quantity in local unit under Column 13 and set the weighted average price using the following formula:

Column 16 - Price per Local Unit (Peso)

Enter under this column the price per local unit of species reported in Column 12.

$$\text{Weighted Price} = n \cdot w_1 \cdot P_1$$

Where: w_1 = Proportion of each size

P_1 = Price of each size of fish per kilo

Example:

Suppose you have the following information for bigeye tuna:

Quantity	Local Unit	Size	W1	P1	w1P1
15	Kilo	Small	15/45	100	33.30
20	Kilo	Medium	20/45	120	53.28
10	Kilo	Large	10/45	150	33.30
<hr/> 45					<hr/> ----- n w1P1 P119.88

The weighted price of bigeye tuna is P119.88 per kilo.

Column 17 - Raising Factor (B/b):

Copy from Sec. E, to be accomplished after the enumeration each day.

Column 18 - Total Unloadings

Multiply Column (13) with Columns (15) and (17). Round off the answer to whole number.

E. SUMMARY OF LANDINGS/UNLOADINGS

This block aims to get information on the number of catcher boats by type of gear used for the whole day.

Fishing Gear

Record all types of gears used in the landing center for the whole day, i.e., gears used in the 1st and 2nd unloading times and those outside the unloading times, if there are any.

Number of Mother Boats

For each unloading time, count the number of distinct catcher boats that used each of the gear listed in the column **"Fishing Gear"**.

Add the numbers obtained for the 1st unloading, for the 2nd unloading (if there are any), and for those outside unloading time/s (if there are any).

Note that for each unloading time, a particular catcher boat must be counted only one regardless of how many carrier boats it served during that particular unloading time.

For landing centers where sampling of boats is employed, indicate the total no. of boats that landed under (B), and the total number of boats that were enumerated under (b).

For landing centers where boats are completely enumerated, number of boats under (B) is equal to number of boats under (b) are the same

R.F. or Raising Factor is taken by dividing (B) by (b).

F. TOTAL FISH CATCH

Take the sum of all entries under Column 18 for all pages of accomplished questionnaires. This represents the total fish catch for the day.

G. REMARKS

Indicate relevant observations in the landing center during the survey day.

FOR THE DATA COLLECTOR:

DATA COLLECTOR - Print your name as sign as Data Collector.

DATE - Write the date of data collection.

FOR THE SUPERVISOR:

SUPERVISOR - Print your name and as sign as Supervisor.

DATE - Write the date of supervision.