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**FOCUS GROUP DISCUSSION ON THE
STRUCTURAL CHARACTERISTICS, PRODUCTION AND TRADING PRACTICES
OF COMMERCIAL FISHING OPERATIONS**

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ABSTRACT

Fishery industry is one of the major sectors that contributed to Caraga's economy. The data from the Philippine Statistics Authority (PSA) show that marine fish production in the region is declining through the years. This study aims to determine the structural characteristics, fish production and trading practices of fish catch of commercial fishing operations in Caraga and to determine the understanding of fishing operators/fishermen on the concepts of fishing activity and operations. The results show the different factors that affect the overall commercial fishing operation in Caraga. The study will serve as a guide in formulating questions and constructing possible categories for the 2022 Census of Agriculture and Fisheries (CAF) questionnaire and provide evidence-based information for policymakers and stakeholders in coming up with interventions and programs for the improvement of fishing operations in Caraga.

Keywords: commercial fishing, fishing operators/fishermen, fish production, structural characteristics, and trading practices

1. Introduction

Structural characteristics of commercial fishing operations, such as the number of commercial fishing operators, number and ownership of fishing vessels/boats, and commercial fishing gears used are among the designated statistics produced by the Philippine Statistics Authority (PSA) from the Census of Agriculture and Fisheries (CAF). Determining issues and challenges on the collection and reporting of data on commercial fishing to deliver relevant and reliable statistics is one of the priorities of PSA.

In preparation for the 2022 CAF, the PSA devised a mechanism for the improvement of the manual and the development and design of questionnaires. One of the mechanisms programmed for the year 2018 was the conduct of the Focus Group Discussion (FGD) concentrating on fishing activities, methods and practices.

The FGD was also conducted in response to the clamor of the Regional Statistics Committee (RSC) to investigate what are the reasons why fishery production had been declining. The request was outlined in RSC Resolution No. 03 (S. 2017) passed on August 4, 2017. The resolution also states that the "PSA is to spearhead the conduct of the research on the factors affecting the decline of annual fish production". This issue will be addressed through the conduct of FGD.

¹ The authors are from the Philippine Statistics Authority (PSA) Regional Statistical Services Office (RSSO) XIII (Caraga) headed by its Regional Director, Dr. Rosalinda C. Apura. The authors wish to thank the PSA National Censuses Service (NCS) particularly Agriculture and Fisheries Census Division (AFCD).

The PSA Regional Statistical Services Office (RSSO) XIII with the technical support of the Agriculture and Fisheries Statistics Division (AFCD) conducted the FGD to determine the structural characteristics, fishing production and trading practices of fish catch of commercial fishing operations in Caraga. Specifically, it aimed to determine the operators' understanding on the concept of commercial and municipal fishing, and gross tonnage and engine capacity of fishing vessel/boat. It also aimed to determine the possible factors affecting the decline of annual fish production.

The results of this study will serve as a guide in formulating questions and constructing possible categories for 2022 CAF questionnaires. It also provides relevant information for policymakers and stakeholders in identifying appropriate interventions and programs for the improvement of fishing operations in Caraga.

2. Methodology

This study employed a combination of qualitative and quantitative research approaches. The Focus Group Discussion (FGD) and Key Informants Interview (KII) were the methods used for qualitative research while the Personal Structured Questionnaire was utilized for quantitative research.

This study was conducted in three major Fish Landing Centers (FLC) in the region, namely a) Wakat, Barobo, Surigao del Sur; b) Placer Port, Placer, Surigao del Norte; and c) Mangagoy, Bislig City, Surigao del Sur (Figure 1).

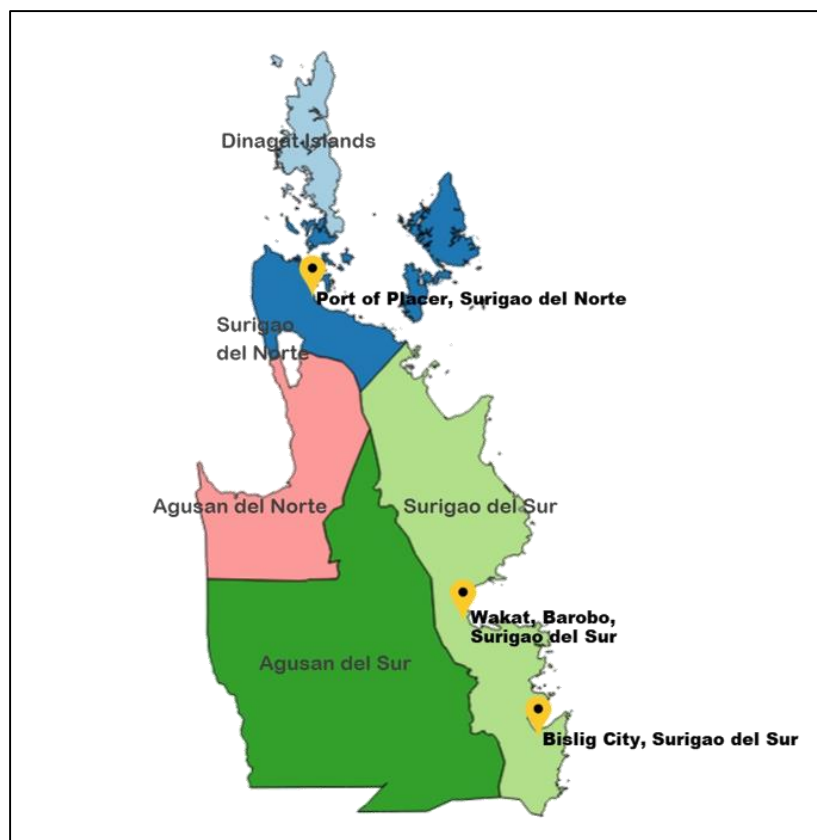


Figure 1. Location of the Focus Group Discussion, Caraga: November 2017 and March 2018

The PSA invited owners/operators of commercial fishing boats, boat captains, and crew members as participants for the FGD. They were identified through the Key Informants (KIs), such as the PSA Provincial Statistics Officer and focal persons for fishery sector, fish port or landing center administrators/supervisors and employees, Bureau of Fisheries and Aquatic Resources (BFAR) staff, and Local Government Units (LGUs) – Economic Enterprises personnel.

After the FGD, these participants were given a Personal Structured Questionnaire to fill-out. They were assisted by the staff of PSA in filling-out the questionnaire. The questionnaire was provided to obtain additional information such as demographic and other information concerning fishing activities such as type of fishing gears owned and rented, other household members engaged in fishing, capacity of fishing boat and the use of *pakura* or a small boat for targeted fishing that is carried by a mother boat to the deep sea. .

The group interviewed Key Informants (KIs) who were either participants of the FGD or not. The KIs were usually boat captains or crew members of the commercial fishing boats, fish port or landing center administrators/supervisors and employees, Bureau of Fisheries and Aquatic Resources (BFAR) staff, and Local Government Units (LGUs) – Economic Enterprises personnel. They were interviewed and asked with related questions on FGD and Personal Structured Questionnaire.

The responses of the participants to the FGD guide questions were organized and processed. For this study, transcription-based analysis was used wherein the researcher prepare a transcription of the FGD audio recorded proceedings and the responses of the participants. After the transcription, the data were organized, encoded, coded and analyzed.

The results from the Personal Structured Questionnaires were tabulated, analyzed and presented in several tables. On the other side, the responses of the Key Informants were analyzed through a combination of transcription-based, note-based, and memory-based analyses. With this, the researcher prepared the transcription of some interviews with the KIs while considering some of the notes and memory of the conversations. The analyses of the KI interview were incorporated either with the results of the FGD or the Personal Structured Questionnaires results.

3. Results and Discussion

The summary of the responses of the participants to each of the guide questions being raised during the FGD is presented below. Responses of some KIs were also noted to supplement the answers of the FGD participants.

- *What is your role in the fishing operation/activity? (Note: The moderator allow the participants to answer without giving any information)*

The respondents have different roles in their fishing operation/activity. In Placer, Surigao del Norte, most of the respondents were operators or owners of the commercial fishing boats. One of the respondents was sent as the representative of his father who was the operator of the commercial fishing boat. Two participants were engaged in municipal fishing.

In Bislig City, Surigao del Sur, some of the respondents were hired boat captains and crew members. There were also operators of "pakura" or small pump boat. There was one respondent who was the operator of a fishing boat at the same time the boat captain of his boat.

- *(For Operator/Owner only)*
How do you clarify the fishing operation/s that you manage? (Note: The moderator probed whether commercial or municipal)
Do you hire boat captain, fishermen/workers? How are they paid (monthly/per fishing trip)? (Note: The moderator noted the responses "in kind")

Most of the respondents in Placer, Surigao del Norte classified their fishing operation as commercial fishing. They considered commercial fishing since their fishing boats have bigger capacity and already engaged in deep-sea fishing. Few of them classified their fishing operation as municipal fishing since their fishing activities were done within the municipal waters using hook and line.

Only few of the respondents in Bislig City replied that they were involved in deep-sea fishing. They cited some of the location of their fishing grounds, e.g. 07°N127°E, 08°N127°E, and 09°N127°E. They never mentioned whether their fishing operation was municipal fishing or commercial fishing. When the moderator already gave a hint to the respondents and asked whether their fishing operation can be classified as commercial fishing, then the respondents replied that they were all engaged in commercial fishing.

Majority of the respondents hired a boat captain as well as the crew members and fishermen for their fishing operation. They entered into a sharing arrangement usually either 60:40 or 50:50. For example, 50 percent of the net income will be given to the hired workers (boat captain and crew members) and the other 50 percent for the operator/owner of the mother boat. They have emphasized that the net income refers to the gross income less expenses that include crude oil, goods for consumption, broker's share (usually 10 percent) and other expenses during the trip. Sometimes, the operator/owner of the fishing boats will give additional incentives to the boat captain by giving a 10 percent share out of the operator's 50 percent share. This kind of sharing scheme was the usual practice among the commercial fishing operators in their locality.

One of the respondents in Placer, Surigao del Norte said that their company paid the hired workers (boat captain and crew members) on a monthly basis. For example, the salary of the boat captain was Php5,000.00 per month while the crew members were Php4,000.00 each per month. In addition to the salary, the company offered productivity or incentive schemes for their workers wherein they will be given a certain percentage of their total fish catch during a particular fishing trip. For example, the workers will be given two trays (35 kilograms of fish per tray) for every 5,000 kilograms of fish catch. The corresponding amount of their incentives will be equally divided among the boat captain and crew members. Also, additional cash incentives will be given per trip, Php1,500.00 for the boat captain and Php1,000.00 per crew member.

All of the participants in Bislig City practiced sharing scheme as mode of payment to their hired boat captain and crew members. In Placer, the majority of the participants (90.0 percent) had a sharing scheme as the mode of payment. However, one of the participants (9.1 percent) had monthly wage with incentive as the mode of payment.

With regards to the fishermen of "pakura", they also entered into a sharing arrangement with the mother boat owners. If the "pakura" is owned by the mother boat operator, usually the sharing was still 60:40 wherein 60 percent of the net income goes to the mother boat owner while the 40 percent for the fishermen of "pakura". However, if the "pakura" is owned by the fishermen and not by the mother boat operator, usually the sharing was 50:50. In this case, 50 percent of the net income will be for the mother boat owner while the other 50 percent will be for the fishermen of "pakura".

- *If you use other's fishing boat, what is the method of payment?*

Most of the respondents did not experience renting a fishing boat. Only one respondent from Placer, Surigao del Norte said that he experienced renting a fishing boat but this rarely happened. He rented the fishing boat at Php3,000.00 per trip.

- *If you use other's fishing gears, what is the method of payment?*

The respondents bought their fishing gears. No one in the group experienced using other's fishing gear.

- *How does/do household member assist in your fishing operation/activity? (probe in the preparation? In catching fish? In selling? Processing? if any).*

Some relatives or siblings helped or assisted the respondents in their fishing operations but usually, they do not live with them in the same household. For instance, their brothers and nephews were some of the crew members.

With regards to the processing of their fish products, they have been processing dried fish but for consumption purposes only.

- *Where do you usually unload/sell your catch? If unloads catch in different Fish Landing Centers: What are the factors that help you choose the fish landing center or fish port to unload/sell your catch?*

All FGD respondents in Placer, Surigao del Norte unloaded their fish catch at Placer Port. They preferred to unload their catch in this port because of the presence of their brokers.

In Bislig City, their fish catch were usually unloaded at Bislig Fish Landing Center because it is where the operators or owners of fishing boats reside. However, the respondents also unloaded their fish catch in other landing centers namely, Mati, Davao Oriental; Kinaplangan, Baganga, Davao Oriental; and Aras-asan, Cagwait, Surigao del Sur.

The following are the factors that they considered in choosing the fish landing center or fish port to unload/sell their catch:

- the supply of ice was already consumed and there is a need to purchase additional ice in the nearest landing center;
 - higher prices of fish products;
 - the fishing boat needs to dock since it encountered engine trouble; and
 - bad weather conditions such as typhoons and low-pressure areas.
- *How do you sell, deliver and process your catch?*

With regards to selling the fish catch, all operators have their respective buyer or "suki" brokers. At the time they unload their catch, the fish brokers, then, deal with the buyers which include retailers, *viajeros*, processing establishments, and hotels and restaurants. In return, the brokers will also cater to the financial needs of their fishing operations and will have a share from the income of the fishing boat.

Only few of the boat owners/operators processed their fish catch to dried fish. They usually

do this for consumption purposes only.

"Unang-una Ma'am, ang broker kung naay mga kakulian pananglitan, andam gyud na siya mu suportu sa amoa Ma'am. Sa panagat Ma'am sa financial okay, mao gyud nay ampay sa panagat Ma'am".

("First of all Ma'am, the broker is willing to extend their support to us in times of need. In fishing operation, it's very advantageous if they satisfy our financial needs").

- FGD Participant

- *What is your understanding about "gross tonnage of the boat"?*

Several respondents in Placer, Surigao del Norte said that "gross tonnage of the boat" refers to the size of the fishing boat and can be computed through its length, width and depth. Some respondents can immediately provide the estimated gross tonnage of their fishing boat. However, some respondents could not give an estimate with regards to the gross tonnage of their boat. Some said that they were not interested to determine the gross tonnage of their boat but they were after the dimensions of their fishing boat.

In Bislig City, several respondents refer the "gross tonnage of the boat" as the capacity of the boat to carry a specific volume of their fish catch, e.g. 1000 kilograms or 1,500 kilograms of fish. These exclude the following: a) weight of the boat; b) weight of the boat captain, crew members and other passengers; and c) crude oil, ice, rice and other goods.

Boat owners/operators in Barobo, Surigao del Sur had a hard time determining the gross tonnage of their commercial boats. Some fishermen shared their ideas on how to get the measurement of the boat. Mr. Mechor B. Bautista of PSA showed the sample computation on how to get the gross tonnage of commercial boats they were operating.

"Bisan ug dugay na ko nag hawid ug mga banca pero dili man kaayo mi interesado ana nga panghuna-huna. Amo lang tinan-awan pag daku-daku na gani automatic na nga commercial fishing na gyud na siya."

("Even though we're handling fishing boats for some time but we're not interested in its measurement. We determine it by just looking with the boat, when the boat looks bigger then we can automatically say that it engages in commercial fishing.")

-FGD Participant

- *What is your understanding about municipal fishing and commercial fishing?*

All of the respondents in Placer, Surigao del Norte have the same understanding about municipal fishing and commercial fishing. They said that when the fishing boat has a gross tonnage of three metric tons and below, it can be classified under municipal fishing or known to them as sustenance fishing. Also, if the gross tonnage of the fishing boat is more than three metric tons then it can be classified as commercial fishing.

According to the respondents in Bislig City, commercial fishing refers to the fishing activity using fishing boats with the capacity to engage in deep-sea fishing or sometimes they refer it as large scale fishing operation. On the other hand, municipal fishing refers to the fishing activity done in coastal waters.

- *What is "pakura"?*

Respondents said that "pakura" is a small pump boat used to catch fish near the payao. These are carried by the mother boat during the fishing trip. The number of "pakura" that the mother boat can carry will depend on the capacity of the mother boat. For example, a mother boat can carry seven "pakura" and there are also mother boats that can carry more than seven "pakura".

These "pakura" are dispersed in the middle of the sea where they will catch fish. In each "pakura", fishermen usually catch tuna species near a fish aggregating device which is locally known as "payao". Usually, they will use hook and line to catch tuna species.

Most of the owners of the mother boat were also the owner of the "pakura". In this case, the fishermen in each "pakura" will be given its share for their fish catch. Usually, after deducting the expenses from the gross income, 40 percent of the net income will be given to the fishermen while 60 percent goes to the owner/operator of the mother boat.

The following are the major results taken from the respondent's answers to the questions reflected in the Personal Structured Questionnaires. The responses of the interviewed KIs were considered and incorporated with the results.

- ❖ *Capacity of Fishing Boats (Gross Tonnage)*

Of the total number of fishing boats owned/used by the respondents, 64.47 percent were fishing boats that have a capacity of more than three gross tons while 30.26 percent have a capacity of three gross tons or less. This implies that there were fishing boats with a capacity of three gross tons or less that engage their fishing operation in commercial waters

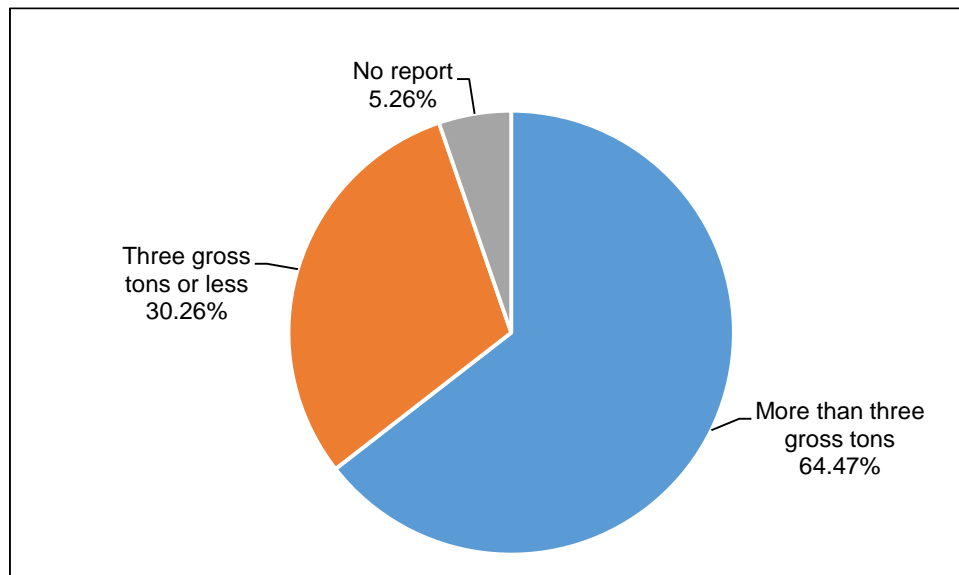


Figure 2. Distribution of the Capacity of Fishing Boats used/owned by FGD Respondents, Caraga: November 2017 and March 2018

❖ *Fishing Trips/Grounds*

- *When do you usually go out to fish?*

Most of the respondents replied that they go out fishing when there is good weather conditions. Also, they preferred not during the full moon. Some respondents said that they go out to fish when there is already available financing for their fishing operation.

- *Usual Fishing Grounds*

The usual fishing grounds are as follows; Pacific Ocean (some called it as “Kamingawan”); Hinatuan Passage; Bucas Grande; Mati; Siargao Sea; Surigao; Surigao del Norte; Surigao del Sur; Municipal Waters of Placer, Surigao del Norte; 07°N127°E; 07°N128°E; 08°N126°E; 08°N127°E; 08°N128°E; 08°N129°E; 09°N126°E; 09°N127°E; 09°N128°E; and 10°N127°E.

❖ *Unloading/Selling*

- *Unloading of Fish Catch*

The usual Fish Landing Center where they unloaded their fish catch are as follows; Placer, Surigao del Norte; Mangagoy, Bislig City, Surigao del Sur; Wakat, Barobo, Surigao del Sur; Cagwait, Surigao del Sur; Baganga, Davao Oriental; Mati, Davao Oriental; Tinablangan, Davao Oriental; General Santos City; and Butuan City.

- *Factors affecting the decision where to unload their fish catch*

There are many factors that the fishermen considered where to unload their fish catch. The following are taken into consideration:

1. Limitations of the Fish Landing Centers
 - Fishing boats cannot dock and unload their catch alongside a quay e.g. small commercial fishing boats cannot dock at Barobo Fish Port during low tide
 - Fishing boats have to anchor far offshore and the catch has to be trans-shipped to the shore using other small boats.
2. Commercial fishing boats preferred to unload their fish catch in General Santos City because of the following:
 - Accommodate big volume of fish
(*Local Fish Landing Center in Caraga region cannot accommodate big volume of fish*)
 - Presence of canning manufacturers
 - Medium to large-scale commercial fishing boats are owned by a company in General Santos City
 - Higher buying price
3. Medium to large-scale commercial fishing boats were sometimes forced to unload their catch in Bislig City because of the following:
 - Engine trouble/problems
 - Bad weather condition (Typhoon, LPA)
 - Purchase of ice, goods, foods, crude oil

(Fish catch will be transported by a company/private fish car to General Santos City)

- *Trading at the Middle of the Sea*

All respondents answered that there was no trading of their fish catch in the middle of the sea. However, some of the respondents in Barobo, Surigao del Sur said that if they will find driftwoods with abundant fish species, they will look and bargain these with the fishermen of big commercial boats.

- *Factors affecting overall fishing operation*

The factors affecting the overall fishing operation are as follows; financing; weather condition (typhoon, LPA, strong winds, hot weather condition); Navy/BFAR regulatory; earthquake; big waves and strong ocean current; fuel/oil prices; availability of supply of ice; illegal fishing; engine condition; boat condition; fishing gear condition; prevailing fish prices; and health condition of the crew especially the boat captain.

4. Findings and Recommendations

The major findings of this study are the following:

- It has been noted that there were fishing boats with a capacity of three gross tons or less that have been fishing in commercial waters. These boats are considered municipal fishing boats since these are fishing vessels weighing three gross tons or less.
- Use of “pakura” to catch fish near the fish aggregating device or locally known as *payao*. The “pakura” are carried by the mother boat and its number depends on the capacity of the mother boat.
- Some respondents have limited knowledge and understanding about “gross tonnage of the boat”. Some boat owners/operators had a hard time in determining the gross tonnage of their commercial boats. Some were not interested to determine the gross tonnage of their boat but they were after the dimensions of the fishing boat.
- All respondents said that there was no trading of their fish catch in the middle of the sea. However, some of the respondents shared that if they will find driftwoods with abundant fish species, they will look and bargain these with the fishermen of the big commercial boats.
- All operators have their respective buyers or “suki” brokers. At the time the fishermen unload their catch, the fish brokers, then deal with the buyers which include retailers, *viajeros*, processing establishments, and hotels and restaurants. In return, the brokers will also cater to the financial needs of their fishing operations and will have a share from the income of the fishing boat.
- Fish Landing Centers (FLCs) are designed for small-scale municipal fishing boats unloading. Some of the established FLCs that were turned over by the Department of Agriculture/Bureau of Fisheries and Aquatic Resources to the Local Government Units

(LGUs) are situated in a shallow area. Fishing boats with a capacity of two to three gross tonnage cannot dock and unload their catch alongside a quay especially during low tide. Fishing boats have to anchor far offshore and the catch has to be transhipped to the shore using other small boats.

- Many factors are being considered by the fishermen in determining where to unload their fish catch. Among these factors are as follows:
 - Residence/location of the operator, financier, broker, buyer;
 - Nearest to the fishing ground; high buying prices;
 - Nearest Fish Landing Center (FLC) when the boat engine encountered problems, bad weather condition and need to purchase ice and other goods;
 - Limitations of the FLC, e.g. fishing boats cannot dock and unload their catch alongside a quay during low tide
 - Commercial fishing boats preferred to unload their fish catch in General Santos City because of the following:
 - Accommodate big volume of fish
 - Presence of canning manufacturers
 - Medium to large-scale commercial fishing boats are owned by a company in General Santos City
 - Offered higher buying prices.

- The following are the common factors affecting the overall fishing operation:
 - Financing
 - Weather condition (typhoon, LPA, strong winds, hot weather condition)
 - Navy/BFAR regulatory
 - Earthquake
 - Big waves and strong ocean current
 - Fuel/oil prices
 - Availability of supply and prices of ice
 - Illegal fishing
 - Engine condition
 - Boat condition
 - Fishing gear condition
 - Prevailing fish prices
 - Health condition of the crew especially the boat captain

Based on the findings of the study, the team recommended the following:

For the Regional Line Agencies (RLAs) especially Department of Industry (DTI), Bureau of Fisheries and Aquatic Resources and the Department of Agriculture

- Conduct feasibility study and market research to encourage commercial fishing boats to unload their catch in any of the Fish Landing Centers in the region;
- To consider establishing fish processing centers;
- To explore other programs or interventions to stabilize fish prices to encourage more unloading in the region;
- To create financing programs to cater to the financial needs specifically of the local commercial fishing boats. They are solely dependent on the financing of their financial brokers and in return, shared them with 10 percent of their income;

- To implement programs that would cater the needs of the crew members including the boat captains, e.g. improvement of weather updates; rescue teams in the locality; health programs such as free vaccinations for the boat captains and crew members;
- To establish Fishing Management Area (FMA);
- To encourage investors to put up fish canning industries in Caraga;
- To establish or construct fish ports in areas where big commercial boats/vessels can dock; and
- To equip local fish ports with complete amenities and facilities.

For the Local Government Units (LGUs)

- To improve the condition of the Fish Landing Centers managed by Local Government Units;
- To conduct their feasibility study and market research to encourage investors to put up fish processing establishments/centers; and
- To improve the recording system on the volume of fish unloaded.

For the Private Sectors

- To tie-up with the government sector and be a partner in promoting the potential of the fishery sector in the region.

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