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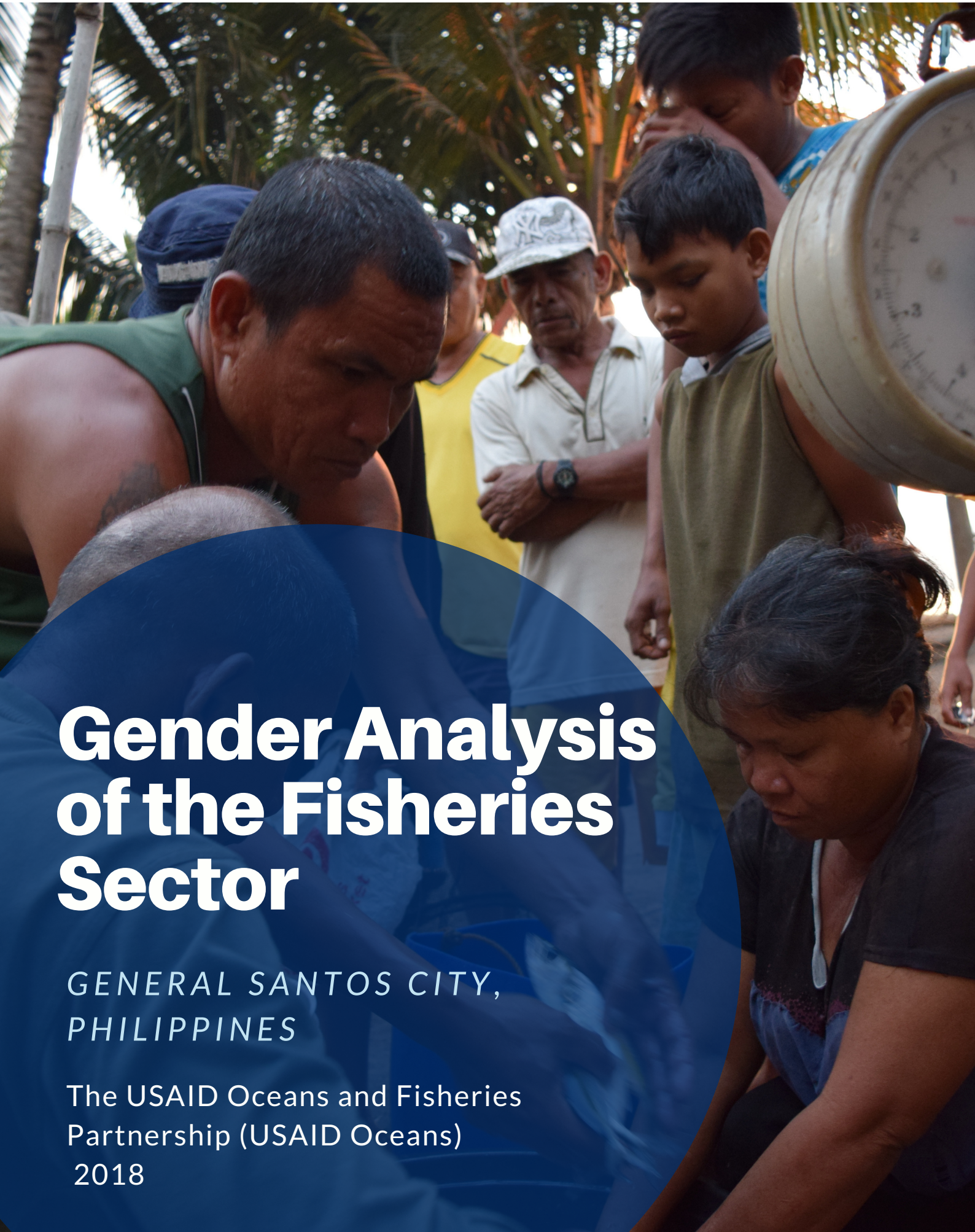

Gender Analysis of the Fisheries Sector

GENERAL SANTOS CITY, PHILIPPINES

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ACRONYMS AND ABBREVIATIONS

AFS	Asian Fisheries Society
BAS	Bureau of Agricultural Statistics
BFAR	Bureau of Fisheries and Aquatic Resources
CDT	Catch Documentation and Traceability
CHED	Commission on Higher Education
CSO	Civil Society Organization
DOLE	Department of Labor and Employment
DTI	Department of Trade and Industry
EAFM	Ecosystem Approach to Fisheries Management
EEZ	Exclusive Economic Zone
FGD	Focus Group Discussion
GAD	Gender and Development
GAF	Gender in Aquaculture and Fisheries
GKK	Gagmay Kristohanong Katilingban
GMP-SSOP	Good Manufacturing Practice – Sanitation Standard Operating Procedures
GRVCA	Gender-Responsive Value Chain Analysis
GSFPC	General Santos Fish Port Complex
HACCP	Hazard Analysis and Critical Control Point
HSP-ISMA	High Seas Pocket Number 1 Special Management Area
IUU	Illegal, Unreported and Unregulated (fishing)
KII	Key Informant Interview
LGU	Local Government Unit
MSY	Maximum Sustainable Yield
MT	Metric tons
NGA	National Government Agencies
NGO	Non-governmental Organization
NICCEP	National Industry Cluster Capacity Enhancement Project
NIPAS	National Integrated Protected Areas System
OCAG	Office of the City Agriculturist
ODK	Open Data Kit
OPAG	Office of the Provincial Agriculturist
PFDA	Philippine Fisheries Development Authority
PGN	Practical Gender Needs
PTCB	Permit to Conduct Business
RAPSCU	Regional Administrative Support Product Certification Unit
SEAFDEC	Southeast Asian Fisheries Development Center
SFFAII	SOCSKSARGEN Federation of Fishing and Allied Industries, Inc.
SFMP	Sustainable Fisheries Management Plans
SGN	Strategic Gender Needs
SOCCSKSARGEN	South Cotabato, Cotabato, Sultan Kudarat, Sarangani and General Santos City
SUCs	State Universities and Colleges
TVAP	Tuna Value Added Products
VAWC	Violence Against Women and Children
VC	Value Chain
WCPFC	Western and Central Pacific Fisheries Commission

WCPO	Western and Central Pacific Ocean
WINFISH	The National Network on Women in Fisheries in the Philippines, Inc.

LIST OF LOCAL TERMS AND DEFINITIONS

Local Term *(Bisaya)*	**Nearest English Translation/Description**
Bantay Dagat	Sea guardians; sea patrol
Barangay	Village; smallest political unit composed of several households and headed by a captain
Bisaya	Language spoken by people from Cebu and many Mindanao provinces; also used to refer to the group of people who speak the language
Bodegero	Warehouseman
Chicharon	Native delicacy made of crisply fried pork or fish skin
Chorizo	Native sausage made from tuna
Dayak	Value added processed food from tuna by-products
Extradors	Relievers/substitutes; hired on per-need basis
Jambolero	Middleman
Kababaihan	Women
Linis dagat	Coastal clean up
Litson	Also "lechon," refers to roasted pig
Sari-sari	Small variety store
Suki	Regular buyer
Talipapa	Small wet market (usually in the neighborhood)

EXECUTIVE SUMMARY

In 2015, the USAID/Regional Development Mission for Asia's (RDMA) Oceans and Fisheries Partnership (USAID Oceans) was launched to strengthen regional cooperation to combat illegal, unreported and unregulated (IUU) fishing and promote sustainable fisheries, in order to conserve marine biodiversity in the Asia-Pacific region. The objectives of USAID Oceans program are to: (i) develop a financially sustainable regional catch documentation and traceability system (CDTS) to combat IUU fishing and seafood fraud in areas where sustainable fisheries management plans (SFMP) are being applied; (ii) expand use of the CDTS to priority biodiversity areas in the Asia Pacific region; (iii) strengthen human and institutional capacity of regional organizations to conserve marine biodiversity through SFMPs, including actions to combat IUU fishing and seafood fraud; and (iv) enhance public-private partnerships (PPPs) to conserve biodiversity, promote sustainable fisheries management, and combat IUU fishing and seafood fraud.

To support the program's objectives, USAID Oceans subcontracted The National Network on Women in Fisheries in the Philippines, Inc. (WINFISH) to conduct a gender analysis of fisheries for the USAID Oceans' learning site of General Santos City, Philippines. WINFISH conducted the research from December 2016 through June 2017, to provide recommendations to USAID Oceans for integrating gender aspects into its activities. Thus, the study identified gender differentials in roles and interactions, as well as gender issues and needs along the value chain. With the empirical evidence generated from the study, USAID Oceans can address these gender differentials and its ensuing concerns, particularly in its CDT and fisheries management activities, in order to promote women's economic empowerment and gender equality. Through this study, strategic interventions to empower and build the capacity of women along the tuna fisheries value chains, and to strengthen women's involvement to promote sustainable fisheries management in General Santos City and the selected sites in Kiamba and Glan of the Sarangani Bay area were identified.

A gender-responsive value chain analysis (GRVCA) was used as the framework along with USAID's six gender dimensions that include access to assets, beliefs (including knowledge and perceptions), practices and participation, time and space, legal rights and status, and power and decision-making. The GRVCA was limited to identifying the gender differentials in roles, tasks, opportunities, and constraints and did not make any economic or financial analysis of the costs, value added, and monetary benefits to the value chain (VC) players. WINFISH used gender analysis tools such as Harvard and Moser to determine the gender differentials in activity profiles, and to generate the strategic and practical gender needs, respectively.

Producers, processors and traders, as the value chain players, were included in the study, together with value chain enablers, which included the government units, its agencies, and other development organizations that make possible the efficient functioning of the tuna fisheries value chain. A survey among 225 respondents (111 males and 114 females) representing the producers, processors and traders, was conducted. The producers consisted of municipal fishers, commercial handline crew/boat operators/owners, and the purse seiners. The processors included the workers in canneries, in frozen production and assembly lines as well as the small-scale entrepreneurs who process fresh/raw tuna into various value-added items. The traders included the *talipapa* (wet markets), the peddlers and vendors, and the support actors to traders such as the brokers and *jamboleros.*

Sixteen key informant interviews (KIIs, four males and 12 females), and eight Focus Group Discussions (FGDs, two all-male, three all-female, and three mixed male-female panels) were likewise conducted. Key informants consisted of individuals who were able to give inputs to the study by virtue of the position/rank they occupied, and/or their active engagement in the tuna fisheries value chain (VC), regardless of the VC node that they belong. There were representatives from both VC players and VC enablers. Focus Group Discussions involved small sets of VC players representing the different VC nodes such as the municipal fishers, those in the assembly line of canneries, the traders at the GSFPC, among others. Additional sources of data came from the results of the value chain-mapping workshop that WINFISH conducted before in-field research commenced, and which was attended by value chain (VC) players and enablers, the enumerators, and program partners. A comprehensive literature review and secondary data analysis was also conducted.

Research instruments were pre-tested and translated into the local dialect, then back-translated to ensure that nothing was lost in the translation process. The survey was conducted paperlessly through mobile data collection tools (Android-enabled smart phones and tablets) and free and open source (Open Data Kit) software.

The study commenced in late December 2016, and field work for data collection was conducted from the middle of January 2016 to early March 2016. The research process was facilitated with the assistance of the Philippines Bureau of Fisheries and Aquatic Resources (BFAR), local government unites (LGUs), the Mindanao State University – Iligan Institute of Technology, fishers' associations and organizations, and other groups engaged in tuna fisheries.

Main Findings

Differentials in Gender Roles -

Tuna industry value chain studies have been conducted in the past, however, there is a dearth of information regarding gender along the value chain. WINFISH's research findings show that gender differentials exist in roles along the tuna value chain for both small- and large-scale fisheries. Results confirm that men generally perform jobs that are more physically-demanding in nature, such as production (i.e., fishing) and hauling, loading and unloading. Women generally perform jobs that are more detailed or transactional in nature, such as preparing for the fishing trips, processing the caught fish, and selling the products. These jobs typically allow women to stay closer to home and on land, so that they may complete their familial responsibilities as well, such as caring for children, maintaining a home, and performing nurturance activities in the family.

There are overlapping roles of men and women along the value chain, both at home and at work, which are more evident in municipal fisheries where a number of tuna-related activities are carried out as family labor. Shared work is generally light such as processing tuna by-products, washing/drying fishing equipment, and preparing the gears. Performing these tasks likewise serve as bonding time for the family or the couple. The multiplicity of women's burdens at home and in peripheral, often irregular, fishing-related work make women more vulnerable to the impacts of low fish catch and low market prices of fish products.

In commercial handline fisheries, women's tasks are fewer than in municipal fisheries, and limited to final inspection/quality control, documentation, recording/reporting, and packaging and labeling in the processing node of the VC. Women's participation in other VC activities is limited by beliefs and practices of a traditionally-male dominated industry. Overlapping roles, similar to those in municipal fisheries, were also observed and include mostly light tasks that women do as an extension of their housework such as disbursements, purchasing, and marketing. Men are involved in pre-processing, butchering, receiving the fish at the plant site, freezing the fish and cold storage, unloading of fresh/chilled/frozen fish from vessels/trucks, cooling, misting, pre-cooking, and cutting into fillet/steak or grinding the meat.

Purse seine fisheries differ slightly in that women also work in processing plants and are preferred over men for their being detail-oriented and their perseverance in standing for long hours in assembly lines. They are also preferred in marketing tasks since they are believed to be patient negotiators but are discouraged from working in cold storage since they are perceived to be physically weak. Women were also observed to perform intermediary tasks in post-catch landing, such as *jambolero,* tray holders, and checkers. Men predominantly work in production.

Among the different types of fishers, the male municipal fishers were found to have the lowest educational attainment (having some grade level of formal schooling), while those with highest educational attainment were male handline owners, having graduated with a college degree. Males generally earn higher incomes than the females. The biggest differential is among fishers in commercial handline fishing.

Domains of Gender Analysis along the Value Chain -

Access to Assets: Self-financing is the main source of funds for municipal fishers, and women have to look for loans (many times, from private informal financiers) when cash is short, while large-scale fishing is financed by the companies and/or big and established financiers.

Municipal fishers rely on their own experiences and other fishers' practices for information on market prices and new fishing technologies. There is no access to real-time databases. Among processors, those in canneries and assembly lines for canned and frozen products, market price information is received from company administration. Small-scale processors get similar information from their suppliers of fish. Other common sources of information were the trade fairs, and the tuna industry associations. Access to reliable information about the buyers was less diverse compared to sources of information on processing technologies.

For traders, the women have higher levels of education but regardless have less access to profitable markets. They sell primarily to consumers within the same barangay where they reside because they need to immediately return home to attend to household chores and childcare. Male traders, on the other hand have greater mobility; hence, greater access to bigger markets. This has resulted in income differentials between male from female traders. Moreover, female traders are more brave, bold, and risk takers compared to their male counterparts in accessing capital from informal money lenders; have more diverse sources of price, technology and market information than men; and have access to storage facilities but husbands have final say on its use, maintenance, and operations.

Knowledge, Beliefs and Perception: Cultural beliefs still prevail about certain female conditions (e.g. being pregnant) bringing bad luck to fishing, hence women are still discouraged from boarding fishing boats. FGDs and KIIs revealed that fishing families and external agencies also discourage women's involvement in certain fisheries roles for reasons such as conflicts with women's household roles, beliefs that women have not developed skills and stamina compatible with fishing, and the concern for the physical security of women. On the other hand, women are perceived to be shrewder than men when it comes to fish trading. There were no statistically significant differences in the perception of males and females for each type of fisher respondents, nor in the knowledge level with regards to fishing regulations/policies, and to tuna species.

For the processors, the women involved in frozen processing had the highest levels of knowledge on tuna and fishery regulations, while the tuna value added products (TVAP) processors had the lowest levels. The top two most popular fish processing-related policies among the three types of processors were the Good Manufacturing Practices (GMP) and the Hazard Analysis and Critical Control Point (HACCP); however, they lacked knowledge in the Philippine National Standard on Tuna Products. Concerning gender-related perceptions, processors in the frozen sector indicated that women were more efficient in processing tuna.

Among the traders, both female and male traders had low levels of knowledge of tuna and fishery regulations, highlighting a critical knowledge gap. Despite their limited knowledge, there are favorable beliefs that can pave the way for increased entry of women into the trading business. Examples are the perceptions that "women are more skillful in trading than men," that "women are easier to deal with than men in trading business, and that "women are more efficient in trading than men." Female checkers and *jambleros* as support actors are perceived to be meticulous and trustworthy.

Practices and Participation: Research data confirmed literature findings that wives of municipal fishers are more involved and have more tasks in pre- and post-fishing activities than the wives of those in handline and purse seine fishing. They work closely with their husbands along the value chain, while the post-capture tasks in commercial fisheries are usually done by hired male personnel, rather than wives of crew.

There are also differentials in the participation of women depending on the VC node where they are most visible. The wives of municipal fishers in Sarangani Province are more involved in pre- and post-fishing activities compared to their counterparts in General Santos City who are more involved in fish processing. Fishers' wives in Glan and Kiamba, for example, are adept in the construction of their husbands' fishing gears. In contrast,

fishers' wives in General Santos City were more skilled, hence, involved in value addition. They were observed to have less participation in the pre- or post-fishing activities with their husbands and generally stayed at home to attend to household matters. Moreover, the research found no instances of any women joining commercial fishing trips that usually last for several days and weeks, in nearby waters such as Davao, Sulu or Zamboanga, to months or a year, for those operating in international waters.

Along the value chain, women were more involved in community affairs than their male counterparts, just as they were more aware of fisheries-related projects. The extent of involvement of men and women varied as to the type of fishing scale which reflects the nature of work-home schedules, and the tasks open to men/women. Generally, males more commonly attended trainings/seminars, while females reported greater involvement in customer relationship management, social gatherings and meetings. For both men and women, there is a low rate of involvement in committee memberships, public hearings, and the *Bantay Dagat*.

Time and Space: Working time and roles are analyzed and categorized by time spent on reproductive work (household work) and productive work (market-based work). On average, wives spend around four hours more on reproductive activities than their husbands, though there are observations that men are increasingly performing more household-related tasks. Men in municipal fisheries spend up to 12 hours in productive activities, and more hours for those in commercial fishing. Handline boat captains reported the highest average working hours, followed by male handline crew and municipal fishers. Handline owners had the lowest at 6.6 hours. Wives of handline owners and handline boat captains worked productively for an average of 7.2 and 4.1 hours, respectively, while those in the other fishing sectors reported 1.5 to 3.2 hours. Both men and women spent the least amount of time daily on community activities.

On the average, traders had the longest work hours at around 12 hours per day with the females spending an hour longer in fish trading and other secondary sources of income. Most reproductive work is performed as shared tasks. Simultaneous and competing demands for productive and reproductive labor time have negatively impacted on women's leisure, sleep/rest, and greatly reduce women's availability for participation in community life.

Across all types of processors, there was no statistical difference in terms of time spent on productive activities. For those working in processing plants, long hours are spent at work, hence, housework is mostly shared by the working couple. In TVAP and frozen processing, women spent more reproductive time than their male counterparts, while the reverse is true in canneries. Among processors, almost no time is spent for community work.

Legal Rights and Status: Both male and female municipal fishers, handline owners, and handline boat captains as well as the males in the handline crew and purse seine groups demonstrated awareness of fisheries laws and policies. Female handline crew and purse seine fisher respondents claimed the lowest cognizance of laws, since they are not directly involved in fishing activities.

In terms of working conditions, purse seine fishers reported better conditions over other groups in terms of social security coverage, insurance and protective gear at work. Municipal fishers are least able to avail of legalized labor benefits because they can ill-afford these as well as for the reason that they are mostly operating in an informal labor market. Similar with those in trading, support actors (i.e. *jamboleros,* checkers, tray holders) lack social security and accident insurance. Inequitable compensation, absence/lack of gender-friendly facilities, and family-work-life imbalance adversely affected quality of life of workers.

Both men and women employed in canneries and processing plants, reported that they received the same salary and benefits from the company, and were provided with protective clothing, eyewear and gloves to do their work. Not all TVAP workers, however, enjoy the minimum wage and benefits. Moreover, there was a higher percentage of regular female workers all throughout the year, whether it was peak or off-season, amongst processors, except for TVAP where these is a higher percent of male regular workers in any season. Both male and female respondents in canned and frozen product processing described their working areas as

well ventilated, well-lit, and with adequate toilet and nursing facilities, but TVAP workers could not claim the same.

Power and Decision-making: In all VC nodes and operation sizes, mothers generally decide on food, budget, leisure activities, health matters, domestic concerns, and community involvement. In TVAP, women generally also decide on matters related to business, and this may be due to their higher level of education and position in the business enterprise. Moreover, female traders who own the trading outfits decide on matters pertaining to trading operations but consult with their spouse out of respect to the position of man as head of the household.

With the exception of small-scale fish marketing, husbands decide on major fishing-related concerns and seldom mentioned the role of wives. The increased role of male co-workers and the low participation of wives is evident in the commercial fisheries groups. Although fathers are not a majority choice as being the decision maker in any area, their roles are particularly notable among the municipal fishers and handline crew.

Both males and females decide on matters related to children, school, work, family planning, education, discipline of the children, and membership in organizations.

Differentials in Gender Issues and Needs -

In addition to the practical and strategic gender needs that researchers identified in the study, gender issues are also categorized in report and include: issues on gender equity and women's empowerment, issues related to sustainable fisheries management, issues related to catch documentation and traceability, issues on human welfare, and other gender-related issues in the industry.

Women's practical gender needs (PGNs) revolve around health concerns and the provision of gender-sensitive facilities and amenities in the workplace, especially for mothers who must combine work time with reproductive roles of watching kids and nursing babies. Strategic gender needs (SGNs) include women's status as an appendage to men's work and women's workspace being limited by beliefs, perceptions, practices, and social and traditional norms in the male-dominated tuna fishing sector. In municipal fisheries where family labor is common, women's work is an extension of husband's tasks, and women's pay is embedded within their husband's. In commercial handline fisheries, there are no women crewmembers. In purse seine fisheries, women's workspaces are limited to extensions of home and kitchen work, such as cutting and cleaning, purchasing and disbursements, and marketing. Men's PGNs center on their health needs which are often ignored because of societal beliefs that men are strong and fit for fishing. SGNs are likewise muted, with men being socialized to take up the dominant roles. The gender issues derived from the gender analysis of the tuna value chain are summarized below.

Issues on Gender Equity and Women's Empowerment: Issues and inequitable conditions include inequitable compensation and family-work-personal life imbalance; family-work responsibilities and tasks reduce women's availability for participation in community life; simultaneous and competing demands for productive (market) and reproductive (household) labor time have negatively impacted on women's leisure and sleep/rest; female traders have higher educational level but, regardless of education, they have less access to profitable markets; men decide on work matters while women consult spouse and decide on home matters; stereotypes about work still prevail and limit opportunities; and societal beliefs and practices hinder women's participation in non-traditional roles.

Issues related to Sustainable Fisheries Management: Research found a low level of knowledge on tuna and fishery regulations; limited participation of women in EAFM; limited reach of the EAFM program among implementers; limited involvement and engagement of men and women in fishery organizations; limited participation of women in EAFM; stereotype that men are for *bantay-dagat*, women are for coastal clean-up activities; and low catch due to overfishing, climate change, coast pirating, illegal fishing nets, missing CRM projects specific for tuna.

Issues related to CDT: Low level of awareness on CDT; lack of orientation and capacity building on CDT for both implementers and partners; absence of fisheries component in the GAD Code; perceived additional cost in adopting a new CDT system; absence of localized institutional CDT mechanism; weak information flow along the tuna value chain.

Issues on Human Welfare: Vulnerability of women to sexual harassment in male-dominated workplace; absence of gender-responsive facilities; inadequate social security and insurance; poor working conditions.

Other Gender-Related Issues: Other gender-related issues in the fisheries industry that impact women's roles include low production and productivity and low incomes from fishing; 100% losses (for self-financed VC players) when business and employment are adversely affected by climate and man-made disasters; poor fish handling and poor compliance to CDT as evidenced by the lack of documentation ultimately affect product pricing; and the long and tedious process in securing fishing permits, and the difficulty in getting Halal accreditation. The first three issues add to the woman's burden of making both ends meet when there are cash shortages for home and work-related expenses. The last one adversely affects the woman's home and work time, therefore reducing gains from reproductive and productive initiatives. Moreover, municipal fishers are generally unorganized and there are no women's groups to influence policymaking and program planning/development for the tuna industry.

Recommendations for Research Policy and Action

Research highlighted several important considerations which USAID Oceans should be aware of, including: the concept of CDT is quite new to most of the fishers in General Santos City and Sarangani Province; there is a common belief among VC players that catch recording is an added burden; the awareness of fishers, both men and women, on laws and policies governing CDT is low; and fishers' involvement and participation in community activities and/or policy formulation are similarly low.

There are, however, opportunities along the value chain as well as an enabling environment to facilitate gender mainstreaming in EAFM/CDT that can be harnessed by USAID Oceans and its partners. At present, there are the VC enablers, represented by government agencies such as BFAR, academe, LGUs and its units such as the Office of the City/Provincial Agriculturist, civil society groups and fishers organizations, as well as development assistance partners which have programs on livelihood and financing, technical and capability building assistance, infrastructure and other facilities enhancement programs, marketing assistance, legal and policy frameworks/mechanisms, information dissemination activities, and opportunities for participation in CDT/EAFM and other community activities. Research also identified numerous local gender champions that have been provided to USAID Oceans for consideration.

Conclusion

Strengthening women's involvement in sustainable fisheries management and catch documentation and traceability through research, policy and action are recommended for USAID Oceans, LGUs, national government, private sector and industry, the educational, research and training institutions, NGOs/civil society, and development partners. The formulation and adoption of a Gender-responsive Tuna Development Plan/Roadmap, and an aggressive CDT/EAFM information dissemination dovetailed for both VC players and enablers are two topmost short-run interventions to pursue.

The WINFISH research team, in the process of conducting the Gender Analysis project, has witnessed the willingness, interest, and appreciation of the tuna VC stakeholders to know more about CDT and fisheries management through EAFM, to strengthen collaboration, and to learn more about gender roles and relationships in the industry. The prospect of higher incomes, increased food safety, broader workspaces, and greater involvement of men and women in the affairs of the industry are all drivers for the VC stakeholders to get interested in related interventions by VC enablers led by USAID Oceans.

1. INTRODUCTION

The importance of the fisheries sector, its benefits to humans, as well as the sector's many challenges are well documented in literature, including corresponding strategies to address sector issues. Sector benefits include, but are not limited the economic, computed value of the fishery product that goes to the market; the nutritional value from fish consumption; other direct benefits derived from the harvested fish; and intangible benefits such as the satisfaction from a fishing experience, the existence value of the fisheries sector, and the benefits from preserving threatened species and habitats. Among all, the economic benefits dominate in the context of marginal communities, which rely on fishing and related activities as their main sources of incomes.

The fisheries sector provides livelihood to more than 1.6 million Filipinos and contributes to the macroeconomy. Its contribution to total Gross Domestic Product (GDP) in 2014 was 1.6% and 1.8% at current and constant 2000 prices, respectively (Philippines Bureau of Fisheries and Aquatic Resources (BFAR), 2014). In the same year, the Philippines enjoyed a net surplus of US $954 million in foreign fish trade. Fish exports totaled 316,863 million tons (MT) with a value of US $1,274,000. Philippine fishery exports identified tuna as having the highest value at 19.6 billion pesos, which amounted to 117,909 MT. This reveals the significance of the tuna fisheries sector to the lives of households and the macro-economy of the country.

Contrary to perceptions that fishing is a male-dominated sector, women are evidenced to also play a critical role in fisheries. This perception began to lose ground starting in the 1990s, when studies revealed that although men perform the capture-related tasks in fisheries, women also play critical roles in pre- and post- production and in near-shore fishing activities (Israel 1993, Legaspi 1995, Rodriguez 1996, Sotto et al 2001, Siason 2013). It has also been recognized that including a gender component in the analysis of fisheries value chains leads to effective fisheries management and development (Krushelnytska, 2015: 2). While men and women both work along the value chain, this does not always mean that their varying needs are considered equally or that they have equal access to an equitable workplace. As such, USAID Oceans, via subcontractor, the National Network on Women in Fisheries in the Philippines, Inc. (WINFISH), has conducted a gender analysis of tuna fisheries in General Santos City and its surrounding areas to identify the needs, priorities, opportunities and challenges face by both men and women along the value chain.

1.1 Background and Context

In 2016, USAID Oceans identified General Santos City and the Sarangani Bay area as a program learning site, in which to pilot an electronic Catch Documentation and Traceability (CDT) system and implement activities to support sustainable fisheries management planning through an Ecosystem Approach to Fisheries Management (EAFM). The learning site CDT system is designed to combat illegal, unreported and undocumented (IUU) fishing and seafood fraud, particularly in areas where EAFM is applied. USAID Oceans advocates for the premise that a successful CDT system must account for and incorporate the diverse needs and perspectives of both players and enablers in the fisheries value chain. That is, both public and private stakeholders, including the civil society members that support and enhance the value chain, need to be involved in the EAFM and CDT initiatives.

Integrating and mainstreaming gender in fisheries can have many positive impacts, and as related to USAID Oceans, can greatly improve CDT and sustainable fisheries management planning initiatives. The use of a gender lens in analyzing the fisheries value chain, from the point of catch to the consumer, supports USAID Oceans in ensuring that key interventions in fisheries management integrate gender aspects by systematically identifying key issues relevant to gender inequalities and gender inequities.

As such, USAID Oceans subcontracted WINFISH to conduct a gender analysis along the tuna fisheries value chain of General Santos City, Philippine, in accordance with the USAID gender dimensions framework.

WINFISH is a non-profit organization, whose members include the University of the Philippines Visayas, Bureau of Fisheries and Aquatic Resources (BFAR) and other government agencies and local government units. WINFISH's organizational objective is to promote a gender-fair society and a gender-responsive fisheries sector. WINFISH is engaged in various activities to support this objective, such as the conduct of gender sensitivity trainings and women's empowerment initiatives, gender studies/research, and forums/extension work, where women in the fisheries sector are heard and their voices are counted in influencing policies and programs that include women either as beneficiaries/clients or as partners in decision-making.

WINFISH conducted the Gender Analysis from December 19, 2016 to June 30, 2017, which focused on tuna fisheries—a well-established industry that greatly benefits the South Cotabato, Cotabato, Sultan Kudarat, Sarangani and General Santos City (SOCCSKSARGEN) region. In order to capture the gender differentials along the tuna value chain and across different types of fishing, the project included both municipal fisheries (small-scale), and the hand line and purse seine (large-scale tuna). Research areas included the USAID Oceans learning site of General Santos City and the municipalities of Glan and Kiamba in Sarangani province, as suggested by the Bureau of Fisheries and Aquatic Resources (BFAR) since these are the communities with greatest number of small-scale tuna fishers.

1.2 Objectives

The results of the Gender Analysis aim to provide inputs to USAID Oceans by integrating attention to gender throughout its activities. It provides empirical evidence by which gender differentials and its ensuing concerns (particularly along concerns on the EAFM/SFMP and CDT) can be addressed towards enhanced gender equality, equity, and women's economic empowerment. Specifically, the analysis has identified the:

- Differential roles and interactions among male and female actors in the tuna fisheries value chain;
- Gender issues and needs, hence, address gender equality, equity, and women empowerment within the scope of USAID Oceans;
- Strategic areas of intervention to empower and build capacity of women along the fisheries value chains;
- Incentives for strengthened involvement of women to promote sustainable fisheries management; and
- Recommendations for gender sensitive policy, research and actions for promoting gender equality and equity and women empowerment in the tuna fisheries sector.

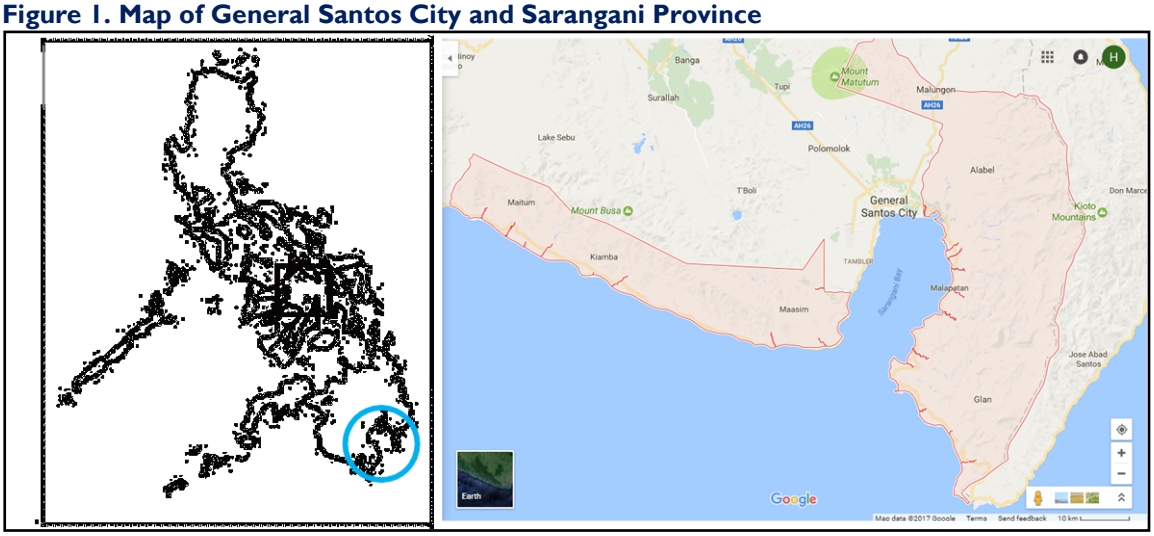
2. METHODOLOGY

The following section identifies the study sites and describes the research design, which includes secondary data collection, meetings and value chain mapping with partners, stakeholder surveys, Focus Group Discussions, Key Informant Interviews, and gender resource mapping. A description of the analytical method used follows, which included USAID's gender analysis framework, together with other gender tools.

2.1 Study Sites

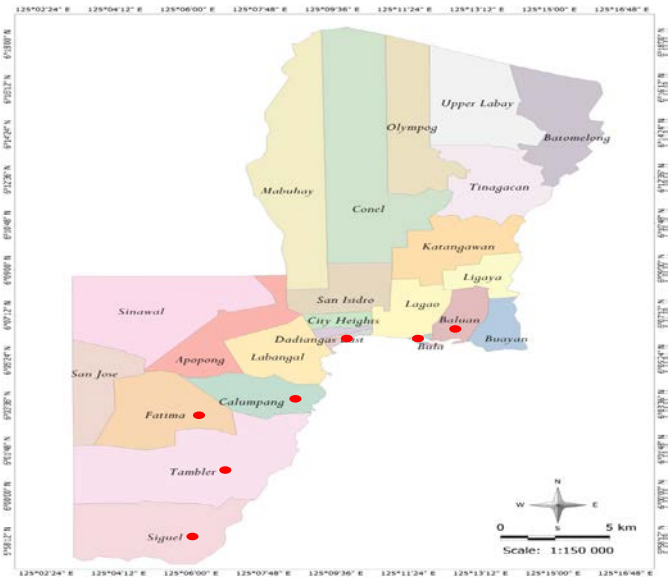
USAID Oceans conducted its Gender Analysis in the SOCCSKSARGEN region in the Philippines, specifically in General Santos City and the Province of Sarangani (Figure 1). General Santos, located in Mindanao, lies at the southern part of the Philippines. It is geographically located within the province of South Cotabato, although the city is administered independently. General Santos City is the regional center for commerce and industry of Region 12. The city and the Province of Sarangani lie along the Sarangani Bay Protected Seascape, which is a protected marine area under the National Integrated Protected Areas System (NIPAS) Law (RA7586 1992, Proclamation No. 756 1996).

Figure 1. Map of General Santos City and Sarangani Province



General Santos City has various coastal and marine ecosystems; it has 284 hectares (has) of coral reefs, 105 hectares of seagrass beds, 37 hectares of mangroves and 68 hectares of estuary. Its sandy beach has a total of 470 hectares and rocky shoreline of 51 hectares. General Santos has 26 barangays, nine of which are coastal with a shoreline that stretches up to 30 square kilometers (sq. km). The coastal barangays are Buayan, Baluan, Bula, Dadiangas South, Dadiangas West, Labangal, Calumpang, Tambler and Siguel. The city has a total population of 77,814 (Office of City Agriculturist 2016). The Province of Sarangani has seven municipalities namely, Alabel, Malapatan, Glan, Malungon, Maasim, Kiamba and Maitum, with 141 barangays. The province used to be part of South Cotabato until it became an independent province in 1992. In 2015, the population of Sarangani was 544,261 people.

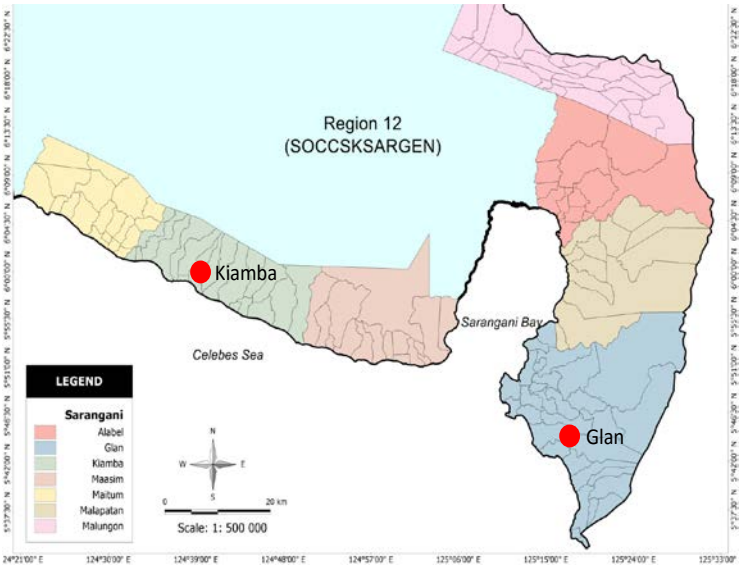
Figure 2. Map of General Santos City showing the twenty-six barangays



Respondents of the household survey, Focus Group Discussions and Key Informant Interviews came from the barangays of General Santos (e.g., Bula, Calumpang, Dadiangas South, Fatima, Tambler, Baluan, Siguel) (Figure 2) and Sarangani Province (Brgy. Pangyan, Municipality of Glan and Brgy. Poblacion, Municipality of Kiamba) (Figure 3). The barangays were chosen with the help of BFAR, and the Office of the City Agriculturist (OCAG) as representatives of the various sectors of the tuna value chains.

Researchers conducted household surveys, Focus Group Discussions and Key Informant Interviews in barangays indicated with red circles (Figure 3).

Figure 3. Map of Sarangani Province divided into seven municipalities



2.2 Research Design

The Gender Analysis relied on quantitative data provided by the field survey and on participatory qualitative approaches provided by key informant interviews (KII), focus group discussions (FGD), and a gender-sensitive value chain-mapping workshop. These were complemented by secondary data gathering, site visits and familiarization, and pocket meetings with stakeholders. An equal distribution of male and female participants ensured data collection activities were gender-balanced and equally represented women and men Value Chain (VC) actors. Moreover, representation from various levels of VC governance was considered for both small-scale/municipal fisheries, and large-scale (purse seine, commercial handline) fisheries. That is, the individual, households and communities (micro), the institutions and delivery systems (meso), and the national policy level

and decision-making agencies(macro) at all VC nodes were represented in the data collection and in the validation of findings.

2.2.1 Secondary Data Collection

Secondary data came from published sources like BFAR, the Bureau of Agricultural Statistics (BAS), Western and Central Pacific Fisheries Commission (WCPFC) publications or obtained from national government agencies (NGAs) and local government units (LGUs) based in General Santos. WINFISH collected data on the number and addresses of registered fishers and fishing vessels from BFAR 12 and the Office of the City Agriculturist (OCAG). BFAR 12 also provided data on tuna canneries and processors. The Department of Trade and Industry (DTI) provided information on the number and addresses of registered companies engaged in Tuna Value Added Product (TVAP) processing. Other information was collected from websites of agencies and organizations. For example, information on the nature of Philippine Fisheries Development Authority-managed ports was provided by the Philippine Fisheries Development Authority (PFDA) website while data on Philippine-owned vessels operating in High Seas Pocket 1 (HSP-1) was provided by the WCPFC website. WINFISH initiated secondary data gathering in December 2016 when the project commenced.

The secondary data provided the inputs to a desk review on the tuna fisheries industry in the Philippines as well as insights on gender in fisheries in other countries as a benchmark and additional guide in finalizing the research instruments and tools. It also served as the sampling framework in the random selection of survey respondents, and the participants to the various FGDs and KIIs that were conducted. The desk research continued until early March 2017 and complemented ongoing fieldwork.

2.2.2 Scoping and Pocket Meeting with Stakeholders

In January and February 2017, WINFISH conducted site visits to the General Santos Fish Port Complex (GSFPC) particularly in Markets One and Two. The actual landing of the tuna catch was observed, as well as the ensuing activities, until the tuna was either brought to waiting trucks/vans or sold to traders. Researchers conducted the visits from 6:30am to 9:30am in order to witness the catch landing and the various activities that followed. The roles of men and women were observed, and researchers documented through photographs. The visits were graciously hosted by PFDA staff who entertained questions and were facilitated by the Alternate Site Coordinator of USAID Oceans who comes from BFAR 12. The Project Team observed gender differentials on site, but mostly limited to the VC node involving catch landing to transport to processing plants and/or traders. The observations and learnings became inputs in the construction of survey instruments and the KII and FGD Guides.

Dr. Rowena Paz Gelvezon of WINFISH conducts site visit and familiarization trip to Markets One and Two of the General Santos City Fish Port Complex.

One-on-one meetings were conducted with potential partners in the first month of project implementation to prepare for in-field research and solicit support for the project. Meetings were conducted with the following groups/individuals: the Vice Chancellor for Academic Affairs and the Research Coordinator of the College of Fisheries of Mindanao State University (MSU), the Regional Director of the Department of Trade and Industry of Region 12, the Assistant City Agriculturist and Gender and Development (GAD) officer of the General Santos City Agriculturist's Office, the head of the Regional Fish Inspection Unit of BFAR 12, the Vice Mayor's representative of General Santos City LGU, and the BFAR 12 Senior Aquaculturist who usually represented the regional director for Oceans-related activities, among others.

Individual and institutional commitments were solicited, such as referrals for enumerators and translators, venues for meetings, sharing of secondary data needed by the project, and participation in research activities. These pocket meetings also served as informal key informant interviews that helped to provide context on the tuna fisheries in General Santos City, as well as contribute in the enhancement of the survey/FGD/KII instruments that were developed by the WINFISH project team.

2.2.3 Inception Meeting and Value Chain Mapping Workshop

WINFISH conducted an Inception Meeting and Value Chain Mapping Workshop on January 9-10, 2017, in General Santos City with 31 participants in attendance from twelve agencies and institutions, such as BFAR OCAG, and relevant local government units.

The Inception Meeting provided participants with an overview of USAID Oceans, its human welfare objectives and gender integration strategy, and introduced the WINFISH team. Presentations and discussions covered topics such as the challenges and future directions of the tuna industry in General Santos City, the profile of General Santos City tuna value chain, gender in Philippine fisheries, and the methodologies to be used for the upcoming field studies.

WINFISH conducts the gendered Tuna Value Chain mapping workshop.

The Gender-responsive Value Chain Mapping Workshop was attended with the same participants as the Inception Meeting, with the addition of the field enumerators. The workshop served to quickly map the known roles and activities performed by men and women in the local tuna industry. The outputs of the day's workshop provided a starting point for discussions and input for the construction of research instruments. It also reinforced with the stakeholders, partners, and the survey enumerators the basic concepts of gender and the value chain in the tuna industry.

At its close, the workshop defined a gendered value chain map for both small- and large-scale tuna fisheries; identified opportunities and constraints of men and women towards gender empowerment in the tuna VC; determined gender needs, issues and concerns of men and women per VC node; and identified measures and recommendations for the attainment of gender equity and women empowerment in each VC node.

2.2.4 Survey

Field surveys were conducted by the research team in late January to March 2017 among the three groups of actors along the tuna fisheries value chain: producers (municipal and commercial fishers), processors and traders. Two hundred and twenty-five respondents were interviewed using the computer-aided personal interview (CAPI) method of data collection. Instead of using printed questionnaires on paper for collecting data, interviewers used Android-based tablets. Respondents came from the selected barangays of General Santos namely: Bula, Calumpang, Dadiangas South, Fatima, Tambler, Baluan and Siguel; and included municipal fishers from Barangay Pangyan (municipality of Glan) and Barangay Poblacion (municipality of Kiamba) in Sarangani Province. There were 111 males and 114 females who served as survey respondents (Table 1).

Three sets of structured questionnaires were developed to facilitate data gathering amongst each of the survey respondent groups (Annex 2). Researchers used the Harvard, Moser and the Social Relations approaches as well as USAID's six domains of gender analysis to guide the development of the survey questionnaires. The survey instruments were designed to capture the following key constructs: productive, reproductive and community roles (i.e., community managing activities and community politics) at each node of the tuna value chain; participant

relationships and interactions; and USAID's six domains, namely access, knowledge, beliefs and perceptions, practices and participation, time and space, legal rights and status, power and decision making. Pre-identified multiple-choice responses were developed for each question, with an added option of 'Others, please specify' to capture answers which were not generally anticipated in the instrument development phase. Researchers translated the instruments to the local dialect and then back-translated to English to confirm that nothing was lost in the process of translation. The survey instruments were pre-tested among individuals with similar characteristics as the target respondents to ensure the appropriateness of the survey instruments.

Table 1. Distribution of Survey Respondents

Respondents	SMALL SCALE/ MUNICIPAL*			LARGE SCALE/COMMERCIAL				TOTAL
	Fishers/ Operators Municipal	Processors	Traders	Fishers- Purse Seine	Fishers- Hand line	Fresh Chilled Frozen Processors	Canned Processors	
Producers	**23** *12M 11F*	**30** *13M 17F*	**45** *22M + 23F*	**10** *6M 4F*	**72** *36M 36F*	**25** *12M 13*	**20** *10M 10F*	**225** *111M 114F*

**includes 20 small scale fishers from Kiamba and Glan both of Sarangani Province*

The survey was paperless. Mobile data collection tools (Android-enabled smart phones and tablets) and free and open source software (Open Data Kit) were used. The paper-less, electronic survey tool had many benefits, including streamlined supplies, decreased paper use, time efficiencies as data did not have to later be manually entered, and additional benefits of data security.

In order to capture local contexts and nuances, experienced local enumerators were hired to do the survey, and were primarily comprised of students and alumni referred by Mindanao State University.

A trainer shows enumerators how to use the tablet and the ODK for the conduct of a paperless survey

Enumerators conduct a mock survey to familiarize themselves with the survey instrument and tools.

Six enumerators and one team leader were hired by WINFISH and attended the three-day Inception Workshop and Training noted in Section 2.2.3, in General Santos City to train them in gender sensitivity and perspective, with the electronic, tablet-based survey tool and interview procedures, and to familiarize them with the content of the survey instrument. Members of USAID Oceans, Southeast Asian Fisheries Development Center (SEAFDEC) and BFAR Central Office participated in the training and provided inputs along the process. Mock and actual field interviews were conducted during the enumerator training and helped to ensure that enumerators were knowledgeable about gender roles and could relate with the questions in the survey instruments. Insights of the exercise served as guides in finalizing the survey questionnaire.

WINFISH electronically generated a random sample of 230 possible respondents from the various lists made available by government agencies. Among producers, five groups were included in the survey: municipal fishers, commercial handline boat captains, commercial handline crewmembers, commercial handline owners, and

purse seine owners. Commercial handline fishers were obtained from BFAR Region 12's list of registered fishers (FishR) while municipal fishers surveyed in Sarangani Province were randomly selected from a list provided by the Municipal Agriculturist Office of the municipalities of Glan and Kiamba. The categorization of fishers into municipal fishers or commercial handline fishers was based primarily on the boat tonnage and the number of days spent at sea. For processors, the National Industry Cluster Capacity Enhancement Project (NICCEP) provided the list of establishments producing tuna value-added products.

For the production node, in municipal fisheries, WINFISH surveyed 23 fishers and their wives (12 males and 11 females). In commercial fisheries, ten purse seine respondents were surveyed (six males and four females) and 72 from handline operations (36 males and 36 females). For the processing node, enumerators surveyed owners and the employees of relevant businesses. There were a total of 25 respondents (12 males and 13 females) from the chilled/frozen sector and 20 respondents (10 males and 10 females) for the canned sector. In this node, more females (17) were surveyed than male respondents (12), owing to the nature of the small-scale food processing sector which is dominated by women. Finally, for the marking/trading node of the VC, 45 respondents (22 males and 23 female) were randomly selected from the *talipapa (*neighborhood wet markets), and those who peddled tuna-like fishes from house-to-house. No large-scale traders or exporters were surveyed because their main offices are based in Metro Manila, however, section heads from their local offices in General Santos City participated in WINFISH-held Focus Group Discussions.

As much as the circumstances allowed, WINFISH surveyed an equal number of men and women respondents for each group of actors. Two hundred and twenty-five respondents were successfully surveyed and their responses to the survey instrument became part of the dataset.

2.2.5 Focus Group Discussions

To complement the results of the survey, WINFISH conducted Focus Group Discussions (FGD), that is moderator- facilitated discussions held with a relatively small group of people on selected set of topics. FGDs were undertaken in order to surface issues and concerns that required depth and probing and which a survey, with its time and number limitations, could not address. Likewise, unclear answers in the interview were discussed more lengthily during the FGDs. Various sets of semi-structured open-ended guide questions were formulated for discussions with participant across each of the various value chain nodes (Annex 3) and translated into the local dialect (i.e. *Bisaya*). Discussion guides whereas aligned with USAID's six domains of Gender Analysis and took stock of survey findings, which needed to be probed and explored in depth. FGD participants came from the same areas where the survey was conducted.

The FGDs were directed at homogeneous groups of actors (e.g. municipal fishers; wives of crewmembers; processors) and were conducted separately according to the VC node. It allowed the participants to discuss issues that were limited within the survey structure. These included questions on the constraining and facilitating factors as they perform their roles in the value chain, particularly focusing on gender relations/interactions; how men-women negotiate their roles within the household, work sphere and community; probe reasons for their gender-related practices and choices.

Dr. Harold M. Monteclaro of WINFISHfacilitates the conduct of all-women FGD of General Santos City.

Eight FGDs were conducted—six in General Santos City, one in Kiamba and another one in Glan, both of Sarangani province (Table 2). Of the eight FGD groups, two consisted of all males, three were all female groups and three were groups mixed male-female participants. The all-male grouping was necessary since fishers and fishing crewmembers in the three types of fishing are dominantly males. In order to get the view/insights of females, a corresponding all-female grouping composed of wives of fishers and fishing crewmembers was deemed an important part of the data gathering. The third all-female group represented the vendors, a sector, which is almost all, composed of women. For the other value chain nodes, mixed male-female FGDs were conducted, to reflect the real gender composition of said nodes.

Table 2. Distribution of Focus Group Discussions Conducted, General Santos Area*

FGD Composition	General Santos City							Sarangani	
								Kiamba	Glan
	Municipal fishers	Purse Seine	Commercial Hand line	Fresh Chilled Frozen	Support Actors in Trading	Canned	Vendors	Small scale fishers; wives	
All Male	FGD 1 – small scale fishers and crew			FGD 3					
All Female	FGD 2 – wives of small scale fishers and crew					FGD 5	FGD 6**		
Mixed: male-female					FGD 4			FGD 7	FGD 8

**Includes small-scale fishers of Kiamba and Glan both of Sarangani Province*

*** Pocket meetings in the wet markets of Calumpang and Poblacion, both of General Santos City*

Researchers held two all-male FGDs, one for producers and one for processors. The producers group consisted of municipal fishers and crewmembers of a commercial fishing fleet; the processors group was comprised of men working for companies producing fresh, chilled, and frozen tuna products. They were technical and skilled male workers such as those assigned in the cold storage facility. The duties include loading and unloading products, maintenance and trouble-shooting of equipment, and record keeping.

The three all-female FGDs represented the production, processing, and marketing/distribution nodes of the VC and consisted of wives of municipal fishers and of commercial handline and purse seine fishers; women in the assembly line of canneries; and vendors.

The three, mixed male-female FGDs consisted of support actors such as the *jamboleros*, tray holders and checkers; municipal fishers and wives and processors in Kiamba; and a similar group in Glan. *Jamboleros* are traders who actively searches, transacts, closes a deal with buyers, and facilitates the transport of goods. They work under the supervision and guidance of brokers.

Focus Group participants were selected by the Office of the City Agriculturist (OCAG), BFAR-National Stock Assessment personnel, and PFDA staff. Participants were chosen largely based on the sector they represented and on their willingness and availability to engage in the FGD. The Sangguniang Panlungsod of General Santos, OCAG, PFDA, and the LGUs of Barangay Poblacion in Kiamba, and in Brgy Pangyan in Glan provided space for the discussions.

Prof. Alice Prieto-Carolinoof WINFISH, facilitates the conduct of all-men FGD of General Santos City.

The FGDs allowed the participants to express their own thoughts on their needs, aspirations, motivations and recommendations for self-development, which may not necessarily coincide with an outsider's recommendations. The FGDs further provided better context to the survey's quantitative results. The FGD analysis, being largely qualitative, involved text/content-analysis, theme identification and cross-checking.

Dr. Rosario H. Asong of WINFISH interviews Ms. Jovy Garrido of the Philippine Fisheries Development Authority

2.2.6 Key Informant Interviews

Individual key informant interviews (KIIs) were conducted with selected actors across the tuna fisheries value chain in order to complement and shed further light on the results of the survey and Focus Group Discussions. The key informants were primarily the value chain enablers at both meso (e.g. associations and fishers groups) and macro (e.g. government units and agencies) levels, as well as other players who could not be part of either the survey or the FGDs due to the nature of their work and schedules. The latter group included the managers, and supervisors of frozen/chilled and canned products, representatives of academic institutions offering fisheries courses, officers of federation of fishing and allied industries, non-government organizations and women's organizations involved in the fishing industry (Table 3).

Table 3. Sets of Questionnaire Utilized for the Key Informant Interviews

Set	Value Chain Members
Set A (Macro)	Representatives from Government Agencies such as Bureau of Fisheries and Aquatic Resources (BFAR), Department of Trade and Industry (DTI), Philippine Fishport Development Authority (PFDA), Department of Labor and Employment (DOLE),
Set B (Macro)	Representatives from Local Government Units (LGUs): Office of the City Agriculturist (OCAG) General Santos City, Office of the Provincial Agriculturist (OPAG) Sarangani Province
Set C (Meso)	Representatives from Private Associations involved in the Fishing Industry, Academic Institutions with Fisheries Courses, Non-government Organizations involved with fisherfolks, Women Fisherfolk Organization, Canneries, Traders

WINFISH developed an interview guide, with questions formulated in alignment with USAID's six domains of Gender Analysis (Annex 3). From this guide, the three sets of KII questions were later customized to suit each of the three interviewee categories. There was no need to translate the questions in the local dialect (i.e., Bisaya) since almost all of the respondents could very well understand the English language. Moreover, both interviewer and interviewee were comfortable switching to Ilonggo and/or Tagalog, as most of the interviewers had Ilonggo roots.

The project team chose sixteen key informants from the three levels of respondents, of which four were males and twelve were females (Table 4). There were more females than males who occupied the key positions relevant to the tuna value chains, hence, females outnumbered the male informants/interviewees.

Researchers conducted the KIIs on March 13-17, 2017, following the completion of the survey so that the interviewers could probe for any data and information gaps from the survey. The KIIs were conducted in the following stages: self-introduction and statement of purpose, the interviewee's (non) acceptance to the Informed Consent, and the actual responses to the guide questions. KII questions were divided into four parts: Personal Information Data, Work-related Information, EAFM subject matter, and Gender and Development-related Information.

Table 4. Distribution of Key Informants

Key Informants	No. of KIIs, by sex	
	Male	Female
Government agencies (Regional Administrative Support Product Certification Unit (RASPCU) of BFAR 12; BFAR 12; Supervisor of the Marketing Operations Division of the PFDA of General Santos; OIC Provincial Director of DTI; Chief Administrative Officer/Field Office Head of DOLE)	1	4
LGUs (Assistant City Agriculturist of General Santos City; Provincial Fisheries Coordinator and Provincial Rural-based Organization Coordinator of Sarangani Province; Provincial Fisheries Officer of South Cotabato)	0	4
Fishing industry associations	0	2
Academe (Vice President for Academic Affairs of Mindanao State University)	0	1
Women's Associations	0	1
NGO (assisting fishers)	1	0
Processor/Cannery	2	0
TOTAL	**4**	**12**

2.2.7 Gender Resource Mapping

Gender Mapping determines the location of women's and men's spaces in the value chain. WINFISH developed a gender resource map for the General Santos City Fish Port Complex (GSFPC) to further enhance and deepen understanding of relations between men and women in the industry. The research team used maps of the GSFPC and General Santos City to note observations while conducting port visits and KIIs. The GSFPC also provided the team with a sex-disaggregated data of personnel involved in the operation of the complex. Some fish port workers and personnel provided information on specific facilities and services in the complex. The spaces dominated by men and women were then indicated on the map and the results analyzed.

Dr. Ida ML Siason of WINFISH presents the findings of the Gender Analysis (fishers survey) during the Validation Meeting, July 2017.

2.2.8 Validation Workshop

Researchers conducted a Validation Workshop in July 2017 in General Santos City to vet research results and validate findings of the gendered analysis of the tuna value chain. The workshop sought to clarify the role of women and men in the CDT system; gaps that may impede the implementation of the CDT system; an incentive scheme to enhance women's participation in CDT and Ecosystem Approach to Fisheries Management (EAFM); and the support needed by the LGUs, academe, civil society organizations, enablers, and the tuna value chain

actors to ensure successful implementation of the CDT and EAFM in General Santos City. Thirty-three participants attended the validation meeting, including 18 tuna value chain players (i.e., municipal and commercial fishers, processors, traders); 14 enablers, and one representative from USAID Oceans (Table 5).

Table 5. Distribution of Participants to the Gender Analysis Validation Meeting

Nature of company/organization	Male	Female	Total
Municipal fishery	7	3	10
Commercial fishery	1	2	3
Processing only	0	3	3
Fishing-Processing-Trading	2	0	2
Enablers	4	10	14
USAID Oceans	0	1	1
Total	**14**	**19**	**33**

2.3 Analytical Method

A gender analysis of the value chain highlights men's and women's roles in tuna fisheries and the differential access to and control of productive activities and the differential opportunities for improvement within the chain. It also assesses the division of labor amongst genders and how gender power relations impact economic rents among the various actors in the different value chain nodes. Moreover, a gender analysis of the value chain recognizes the phenomenon that there are gendered differentials in the various value chain functions which, in turn, dictate the patterns of behavior of men and women.

The Harvard analytical framework, also referred to as the Gender Roles Framework, was used to map the work, resources, and highlight the differences of women and men along the tuna value chain (March et al 1999). The Harvard framework analyzes productive and reproductive roles, with questions including: Who does what? Who has access to and control of economic resources? Who benefits? What influences the gender differentials, hence, shape gender relations? How are men and women affected differently by the same circumstances in the tuna industry? How should enablers respond differently to men and women in a given situation, knowing that there exists gender differentials in needs and concerns? Cognizant of the USAID's interest on CDT and EAFM, researchers made a particular emphasis on these areas in the process of data collection.

On top of Harvard's concept of productive and reproductive roles, researchers applied the Moser framework to assess community roles, which are further categorized into community managing activities and community politics (GIDP/UNDP 2001). Moser's framework of practical and strategic gender needs along the tuna value chain are likewise included in the analysis. These are needs which have consequences on women's and men's roles, tasks and responsibilities, hence, must be addressed towards enabling the women to challenge the existing inequalities along the value chain.

The identification of gender-based needs is a critical step in developing CDT/EAFM interventions that integrate and mainstream gender concerns, thus empowering and building the capacity of the women in the value chain and promoting gender equality and equity. For the purpose of this study, the following conceptual framework was used in conducting the gendered tuna value chain analysis (Figure 4). The gender analysis focused on three nodes of the tuna value chain in General Santos City and the Sarangani Bay area, including fishers and operators, processors, and traders. The analysis applied USAID's six gender dimensions to assess gender differentials in access to resources; beliefs, knowledge and perception; practices and participation; time and space; legal rights and status; and power and decision-making (Table 6).

Figure 4. Framework for the Gendered Tuna Value Chain Analysis

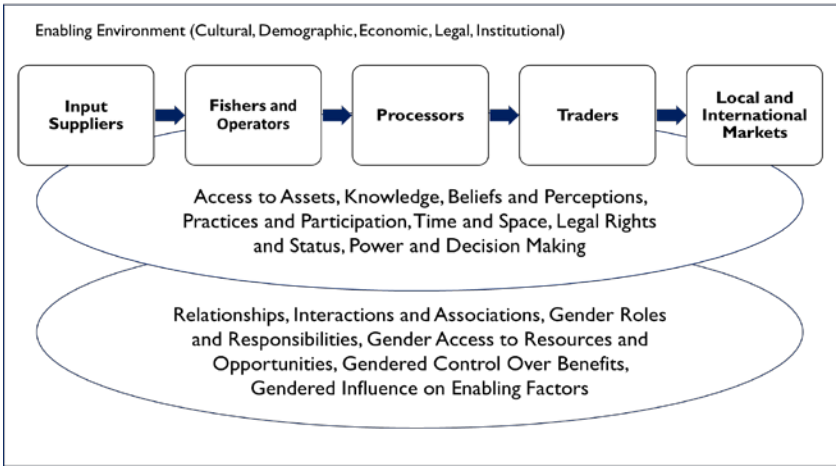


Table 6. USAID's Gender Analysis Framework

Domain	Definition
Access to Assets	A person's ability to use the necessary resources to be a fully active and productive participant (socially, economically, and politically) in society. It includes access to resources, income, services, employment, information, and benefits.
Beliefs (including Knowledge and Perceptions)	The types of knowledge that men and women possess, the beliefs that shape gender identities and behavior, and the different perceptions that guide people's understanding of their lives, depending upon their gender identity.
Practices & Participation	Peoples' behaviors and actions in life—what they actually do—and how this varies by gender roles and responsibilities. The questions include not only current patterns of action, but also the ways in which men and women may engage differently in development activities. Some of these types of action include attendance at meetings and training courses and accepting or seeking out services. Participation can be both active and passive.
Time & Space	The availability and allocation of time and the locations in which time is spent. It considers the division of both productive and reproductive labor; the identification of how time is spent during the day (week, month, or year, and in different seasons); and determines how men and women each contribute to the welfare of the family, community, and society. The objective of this domain is to determine how men and women spend their time and what implications their time commitments have on their availability for program activities.
Legal Rights & Status	How people are regarded and treated by customary legal codes, formal legal codes, and judicial systems. The domain encompasses legal documentation such as identification cards, voter registration, and property titles. Additionally, the domain includes the right to inheritance, employment, atonement of wrongs, and legal representation.
Power & Decision-Making	The ability of people to decide, influence, control, and enforce personal and governmental power. It refers to one's capacity to make decisions freely, and to exercise power over one's body, within an individual's household, community, municipality, and state. This domain also details the capacity of adults to make household and individual economic decisions including the use of household and individual economic resources, income, and their choice of employment.

Source: USAID (2011), "Tips for Conducting a Gender Analysis at the Activity or Project Level"

Researchers, likewise, investigated the gendered influence on enabling factors. The analysis focused on determining the degree of influence of men and women on policymaking and legislation to promote their economic rights and to make the overall environment more conducive to gender equality.

The data collected in the field were encoded and presented in contingency tables. For testing the differences between proportions across different categories of the independent variable, chi-square tests were used to determine significance. However, a chi-square test is only valid if no more than 20 percent of the cells have expected frequencies less than five. In some situations, merging of categories was utilized to satisfy the assumption of the test. In cases, where a two by two contingency table did not satisfy the requirements of the

test, the Fisher's exact test was used instead of a chi-square test. In this study, a five percent level of significance was used. Comparisons between men and women across the value chain were made according to the USAID Gender Analysis Framework.

The content of the FGDs and KIIs were analyzed qualitatively through text analysis, theme identification and cross-checking of responses with data generated from the survey. The team likewise discussed and integrated all data/findings from the inception workshop outputs, survey, FGDs, KIIs, the value chain mapping workshop, and comments made by concerned agencies on previous presentations and reports of preliminary findings. Field notes and experiences from site visits and ocular inspection as well as findings from secondary data collected likewise enriched the analysis of the tuna value chain using the gender lens. Sex-disaggregation and gender balance at all phases of the research implementation was well-observed.

2.4 Limitations and Challenges

The successful implementation of the Gender Analysis study was facilitated by a strong collaboration with partners and stakeholders, among others. There were, however, a handful of challenges. First, was the absence of a registry for those in the secondary/informal market such as fish vendors. Thus, the research team was limited in the use of existing registries. Second, was a difficulty in finding a common free time for FGD participants, thus several meetings were rescheduled, and the duration of fieldwork was extended. Fishers were usually out at sea during daytime or for several days, and vendors were in the wet markets from early morning to as late as 10:00PM in the evening. Finally, researchers found difficulty in connecting with big boat owners, some of whom are residing or have business addresses in Manila. To address this, researchers sent letters promptly and made several follow-up calls.

3. THE PHILIPPINE TUNA INDUSTRY

This chapter contains results from WINFISH's desk review and analysis of secondary data and related literature. It describes the Philippine fisheries sector, the profile of the tuna fisheries industry in General Santos City and gender aspects of the Philippine tuna industry. It highlights major findings of a literature review regarding the industry, and includes topics on fisheries production, fisheries management, fisheries value chain and gender in fisheries.

3.1 The Fisheries Sector

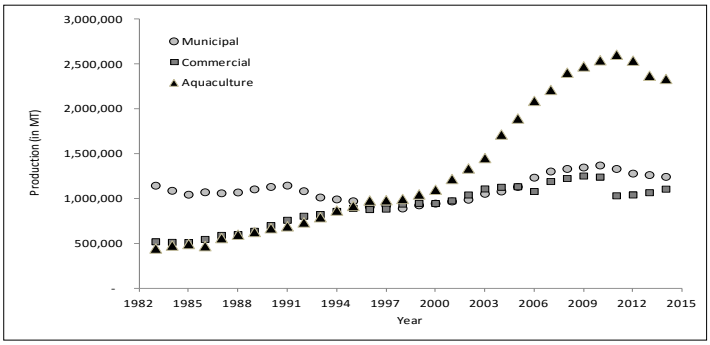
3.1.1 Fisheries Production in the Philippines

The fisheries sector in the Philippines is comprised of capture fisheries, which is further divided into municipal fisheries and commercial fisheries, and aquaculture (Republic Act 8550 1998). Municipal fisheries are defined by using vessels that are three gross tons (GT) or lower, while commercial fisheries use vessels more than three GT.

The Philippines is one of the top fish producing countries in the world. In 2013, the Philippines ranked seventh among countries worldwide with a total production of 4.7 million metric tons of fish, mollusks, crustaceans and aquatic plants including seaweeds (BFAR 2014). In 2014, the capture fisheries sector produced 2.35 million MT of fish–about half of total national production (BFAR 2014). Before 1995, the municipal fisheries sector used to contribute more fish landings compared to the capture fisheries sector. However, municipal fisheries landings have since declined while commercial fisheries sector landings have increased (Figure 5).

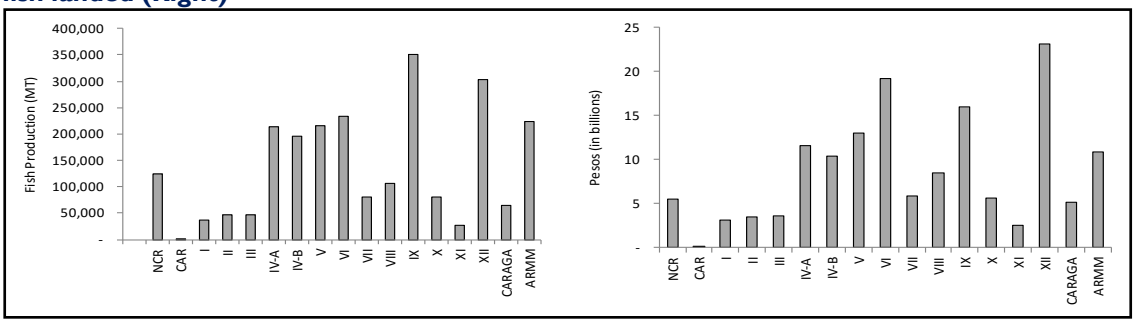
Among the different regions in the Philippines, Region 9 (Zamboanga Peninsula) registered the highest capture fisheries production in 2014 (Figure 6) due to the large sardine landings (BFAR 2014). Region 12 (SOCCSKSARGEN), home to General Santos City, followed with 302,442 MT fish production or about 12.9% of the national value. In terms of value, however, Region 12's capture fisheries production was highest with fish landings worth more than 23 billion pesos or about 15% of the value of the national capture fisheries production (Figure 6). Fish landings from the commercial fisheries sector were highest in Region 12 at 255,443 MT (Figure 7) (BFAR 2014).

Figure 4. Philippine fisheries production by sector, 1983-2014



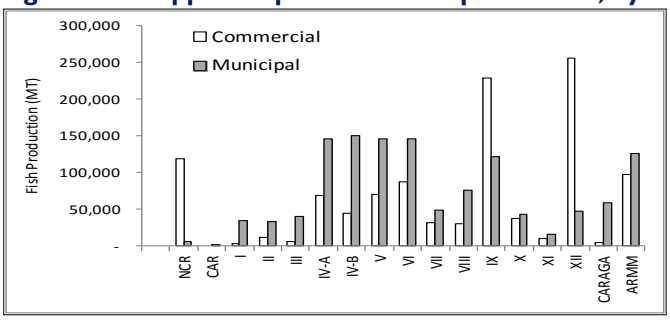
Source: BFAR 1983-2014

Figure 5. Philippine capture fisheries production by region in 2014 (Left) Quantity and value of fish landed (Right)



Source: BFAR 2014

Figure 6. Philippine capture fisheries production, by sector and region in 2014



Source: BFAR 2014

3.1.2 Fisheries Exports

In 2014, fish exports totaled 316,863 MT with a value of 1.27 billion US dollars. Among Philippine fishery exports, tuna was the biggest export item in terms of volume and value (BFAR 2014). In 2014, tuna valued at 19.6 billion pesos were exported to major markets such as the United States, Japan and the United Kingdom. Most of the tuna exports were canned, although others were in fresh/chilled/frozen and smoked/dried forms. Other high-earning exported fishery products were seaweeds and shrimps valued at about 11.7 billion and 5.3 billion pesos, respectively (Table 7). Other exported products included crabs, cephalopods, groupers, live ornamental fishers, round scads, and sea cucumber.

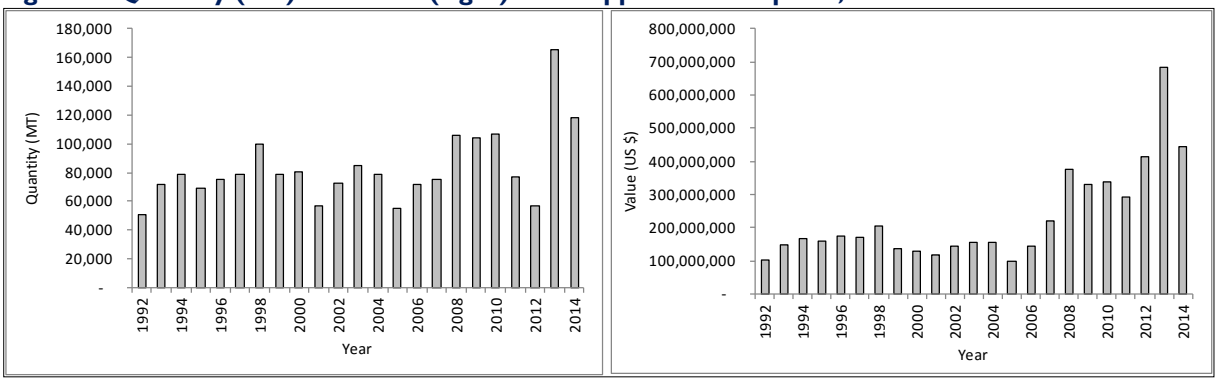
Table 7. Major fishery exports in terms of value, 2014

Commodity	Quantity (MT)	Value (in '000 pesos)
Tuna	117,909	19,597,882
Seaweeds	42,469	11,687,900
Crabs	11,914	5,881,136
Shrimps	8,917	5,313,847
Grouper	13,441	2,051,377
Octopus	4,132	1,124,110
Squid and cuttlefish	9,085	842,811
Live ornamental fish	5,988	266,928
Sea cucumber	171	116,666
Roundscad	191	13,205
Other commodities	102,645	9,453,412
Total	**313,863**	**56,349,274**

Source: BFAR 2014

Tuna exports increased over the period of 1992 to 2014. In 2013, tuna exports amounted to 165,757 MT with a value of 681 million US dollars (Figure 8). In 2014, tuna exports amounted to 117,909 MT resulting in a decline by 29% and 35% in terms of volume and value, respectively.

Figure 7. Quantity (left) and value (right) of Philippine tuna exports, 1993-2014



Source: BFAR 2014

3.2 Philippine Tuna Industry and Fisheries

General Santos City is the major producing site of tuna in the Philippines (Yamashita 2008). Historically, tuna fishing dates back to the 1900s, confined to nearshore areas for subsistence purposes, but the reputation of General Santos City as the tuna capital of the Philippines started in the 1970s when investors financed tuna fishing ventures as encouraged by a surge in demand for sashimi-grade material in Japanese markets (Vera and Hipolito 2006). A significantly large portion of General Santos City's harvest goes to canning factories. Tuna and skipjack are used as materials for canning, while yellow fin tuna is used for sashimi and is exported predominantly to Japan, Indonesia and Taiwan.

Twenty-one species of tuna and tuna-like fishes are caught in Philippine waters (Dickson and Natividad 2000, Barut 2002). Four species are regarded as large tunas – the yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), albacore (*Thunnus alalunga*) and skipjack (*Katsuwanos pelamis*). Other species are classified as small tunas – the frigate tuna (*Auxis thazard*), bullet tuna (*Auxis rochei*), eastern little tuna (*Euthynnus affinis*), and longtail tuna (*Thunnus tonggol*). In recent years, the Pacific bluefin tuna (*Thunnus orientalis*) has been officially reported as occurring in northern Philippine waters (Sarmiento et al 2016). Some of the tuna species are neritic species or those that inhabit nearshore waters such as the eastern little tuna, frigate tuna, bullet tuna, and longtail tuna. Others are oceanic species or those that predominantly reside in deep waters beyond the continental shelf. These include the skipjack, yellowfin tuna, bigeye tuna, albacore and Pacific bluefin tuna (Barut 2002, Servidad-Bacordo et al 2012, Sarmiento et al 2016). In addition to tuna caught within the Philippine's EEZ, Filipino fishers also conduct tuna fishing in international waters in the Western and Central Pacific Ocean.

3.2.1 Tuna Production in the Philippines

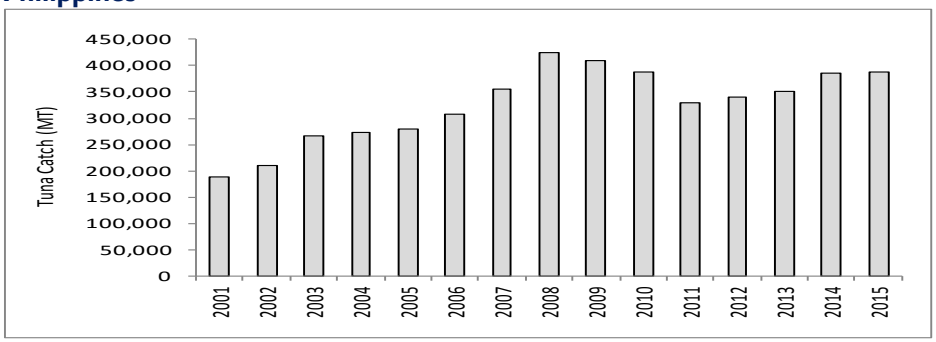
In the western and central Pacific Ocean region, the Philippines is considered as a major tuna producer (WCPFC, 2016). Tuna fishing occurs in all fishing grounds of the country, but the highest catch is from Moro Gulf, Sulu-Celebes Sea, Western Philippines Sea and southern Luzon. Tuna landings are caught inside the Philippines' Exclusive Economic Zone (EEZ) and outside Philippine waters (e.g., Papua New Guinea, Indonesia and high seas). However, the agreement between the Philippines and Indonesia to allow Filipino tuna fleet to access Indonesian waters expired in 2006 (Barut and Garvilles 2007). No foreign flag vessel is allowed to fish in the Philippine EEZ, although a considerable amount of illegal, unreported and unregulated (IUU) fishing, much of which involve tuna vessels, occurs (Barut and Garvilles 2016). In the country, landings and transshipments by foreign longline vessels are permitted only in Davao (Toril). In 2010 to 2015, about 2,200 to 4,000 MT of mostly

tuna, which are assumed to be taken outside Philippine waters, were landed per year in Davao (Barut and Garvilles 2016). These are caught in foreign waters since no foreign vessels are allowed to fish in Philippine EEZ.

Of the twenty-one species of tuna and tuna-like fish caught in the Philippines, only six species are exploited in commercial quantity (Barut 2002). These are yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), skipjack (*Katsuwanos pelamis*), eastern little tuna (*Euthynnus affinis*), frigate tuna (*Auxis thazard*) and bullet tuna (*Auxis rochei*).

Skipjack production was highest among the dominant large tuna species. In 2001, skipjack production was more than 105,000 MT, with more than 76% coming from the commercial fisheries sector. Skipjack production steadily increased until 2009 when it reached its peak at 251,524 MT (Figure 9). It declined in 2010 but again increased in 2012. In 2015, more than 240,000 MT skipjack was landed, about 83% of which were from the commercial fisheries sector.

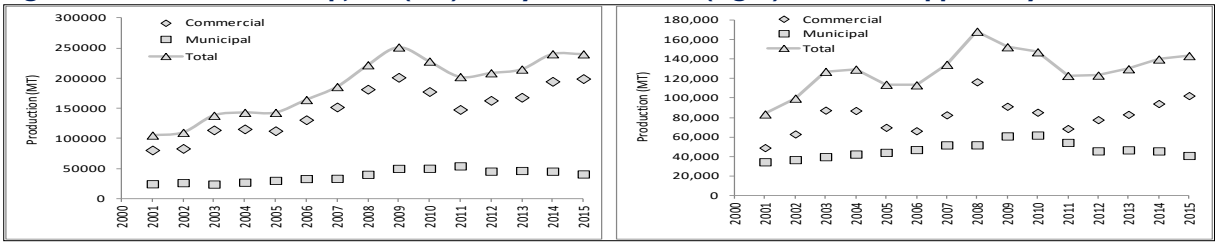
Figure 8. Production of dominant, large tuna species (yellowfin, bigeye and skipjack) in the Philippines



Sources: BAS 2001-11, WCPFC 2012-15

Yellowfin tuna production was 83,560 MT in 2001, of which more than 58% came from the commercial fisheries sector. Yellowfin landings increased until 2004 (Figure 10) when it declined until 2006 and again increased in 2008 when it reached highest production at 168,410 MT. Production declined again until 2011 after which it steadily increased. In 2015, yellowfin production was 143,387 MT with more than 71% coming from the commercial fisheries sector (BAS 2001-2011; Barut and Garvilles 2007; WCPFC 2016).

Figure 9. Production of skipjack (left) and yellowfin tuna (right) in the Philippines by sector.



Sources: BAS 2001-11, WCPFC 2012-15 *Note: Yellowfin landings data from 2001-04 may include bigeye tuna.*

It should be noted that there were unreported past statistical reports (before 2003) especially among the commercial fishers (Barut and Garvilles 2007). Many authors have also proposed revision of tuna statistical records because of misreporting, misidentification (especially between yellowfin and bigeye tuna), miscommunication with respondents and other errors (Lewis 2004; Babaran 2007; Itano and Williams 2009; Palomares and Pauly 2014). These reports assert the need to clarify catch data because these will have impact on the estimation on the status of stock exploitation.

3.2.2 Tuna Fishing Methods

Tuna fishing is a traditional activity among Filipino fishers that dates back to early 1990s (Vera and Hipolito 2006). Commercialized tuna fishing slowly started during the Japanese occupation (1942-44). At present, Filipino fishers catch tuna using a variety of fishing gears such as purse seines, ring nets, bag nets, handline, longline, and set nets. The use of purse seines, ringnets and handlines usually account for more than 75% of the annual tuna catch (BFAR and WCPFC 2012).

Small-Scale Tuna Fisheries

Tuna captured by small-scale fishers is usually through the use of fishing gears such as handline, longline, multiple handline, troll line, gillnets, fish corral, and beach seines. There are two types of handline fishers: the *palaran*, those confined in the municipal waters; and the *pamariles* fishers who venture beyond the country's EEZ (Vera and Hipolito 2006). In 2015, handline production was responsible for more than 45% of the national tuna catch (Table 8), and more than 75% of the yellowfin catch in the country.

Table 8. Reconciliation of 2015 tuna catch estimates by gear and species with the 2015 BAS total tuna catch estimates (in MT)

Gear/Species	Skipjack	Yellowfin	Bigeye	Total
Purse seine	42,594	13,332	1,034	56,959
Ringnet	37,471	7,955	373	45,799
Handline	23,774	72,646	2,000	98,420
Others	11,797	2,266	220	14,283
Total	115,636	96,199	3,627	215,461

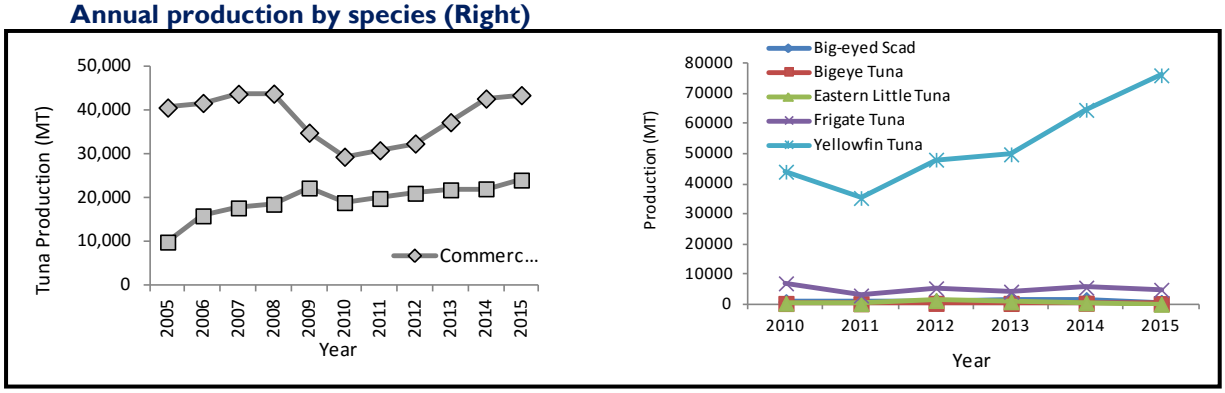
Source: Barut and Garvilles 2016

Commercial Scale Tuna Fisheries

Purse seines and ring nets contributed a combined catch of more than 47% of the national tuna production in 2015 (Table 8). The purse seine fleets are also the primary suppliers of tuna to canneries in General Santos City. Many of the tuna fishing gears such as purse seines and ring nets employ fish aggregating devices (FADs or locally known as *payao*) during operation. It is theorized that fish are associated to *payaos* through foraging, shelter, or attraction (Marsac et al 2000, Babaran et al 2008, Hallier and Gaertner 2008, Babaran et al 2009). Once there is a considerable size of fish aggregation, the fish school is surrounded by purse seine or ring net to catch fish. The use of *payao* was one of the most important developments in pelagic fishing that significantly led to increased tuna production and expansion of purse seine and other fishing gears. The introduction of *payao* in tuna fishing in 1975 prompted the rapid development of the tuna fishery (Dickson and Natividad 2000). The use of *payaos* have been reported to be an environmental threat because a large number of fish associated with *payaos* are juveniles (Dempster 2004, Monteclaro 2005, Mitsunaga et al 2012) which could perpetuate overfishing.

In 2015, the commercial fisheries sector produced almost twice the fish landings than the municipal fisheries sector. Landed catch from the commercial fleet declined in 2009-2010 although it has slowly increased thereafter. The municipal fisheries catch has been increasing since 2005. Figure 10 shows the annual tuna and tuna-like production in General Santos City from 2005 to 2015.

Figure 10. Annual tuna production in General Santos City (Left). Annual production by species (Right)



Source: BFAR XII 2016

3.2.3 Tuna-Post-Harvest and Related Industries

Infrastructures

Ports in the Philippines are classified as fish ports (those that primarily serve the fishing industry), feeder ports (those that provide linkages among neighboring small islands and urban centers using small passenger and fishing vessels) or commercial ports (those that cater to public with vessels more than 30 gross tons) (Israel and Roque 2000).

The Philippine Fisheries Development Authority (PFDA) manages the eight government fish ports in the country. The largest is the Navotas Fishing Port Complex, which also has the highest production among the major ports. Aside from these PFDA-managed ports, there are hundreds of public and private fish ports all over the country. The public fish ports are usually managed by the local government units (LGUs). Cruz (1997) reported that there were 64 major and 293 minor fish landing centers in the Philippines. Israel and Roque (2000) reported that as of year 1997 there were 447 fishing ports (7 regional and 440 municipal) in the country. For municipal fishers, however, tuna is landed in more than 8,000 landing sites all over the Philippines.

While the Navotas port is the biggest in size and fish landings, the General Santos Fish Port Complex (GSFPC) is the country's largest tuna unloading port, with 217,630 MT total unloaded in 2015 (Barut and Garvilles 2016). At the GSFPC, catch of handline fishers are landed at Market 1 while purse seine catch are landed at Market 3. There are also designated areas for big fishing companies where tuna trading is undertaken. The complex houses ice plants, cold-storage facilities, market halls, pier landings and loading areas that greatly contribute to the local tuna industry's global competitiveness. A weighbridge station and a fish sorter/conveyor are also present. Market 4 houses the meter harbor basin, concrete roadway and apron, loading area, freshwater pump house and drainage sewerage system. All these are important to ensure the export quality of tuna meat (Vera and Hipolito 2006). The GSFPC port facilities have complied the international standards for Hazard Analysis and Critical Control Point (HACCP) and Good Manufacturing Practice – Sanitation Standard Operating Procedures (GMP-SSOP). It is accredited by the European Union, Japan and United States (Barut and Garvilles 2016).

Tuna Post-Harvest Industries

General Santos City is regarded as the premier fish producer in the country because of the large volume of fish landed in its fishing port complex. More than 90% of fish landed in General Santos City are tuna and tuna-like species. Tuna is sold either as fresh/chilled/frozen or in processed form. Processed tuna products are canned tuna, smoked tuna, dried tuna, or prepared tuna (BFAR 2016). Hand line fishing is the predominant method for fresh and frozen sashimi grade that goes to export processors and the domestic market. Most of General Santos City's tuna products are exported to the US, Japan and European countries (Barut and Garvilles 2016).

At present, there are nine tuna canneries in the Philippines, six of which are based in General Santos City (Table 9). Two other companies are based in Zamboanga City, one is based in Luzon, and two Philippine-owned and

operated canneries are based in Papua New Guinea (Barut and Garvilles 2016, RD Tuna Canneries Ltd. website). Another Philippine company, the Citra Mina Canning Corp., is also poised to open a tuna cannery. There are more than 17 frozen tuna processors in the country, and about 70% of these are located in General Santos City. In addition, ancillary industries in line of tuna production are also present. These post-harvest industries provide about 3,000 to 8,000 jobs to Filipino workers (Vera and Hipolito 2006, Barut and Garvilles 2016).

Table 9. Tuna canning companies owned by Filipino Companies

Name of company	Location
Alliance Select Foods	General Santos City
Celebes Canning Corporation	
GenTuna Corporation	
Ocean Canning Corporation	
Philbest Canning Corporation	
Seatrade Canning Corporation	
Permex Export Producer Corporation	Zamboanga City
Bigfish Food Corporation	
CDO Foodsphere, Inc.	Malvar, Batangas
RD Tuna Canners Ltd.	Madang, Papua New Guinea
Frabelle Fishing Corporation and Century Canning Corporation	Lae, Papua New Guinea

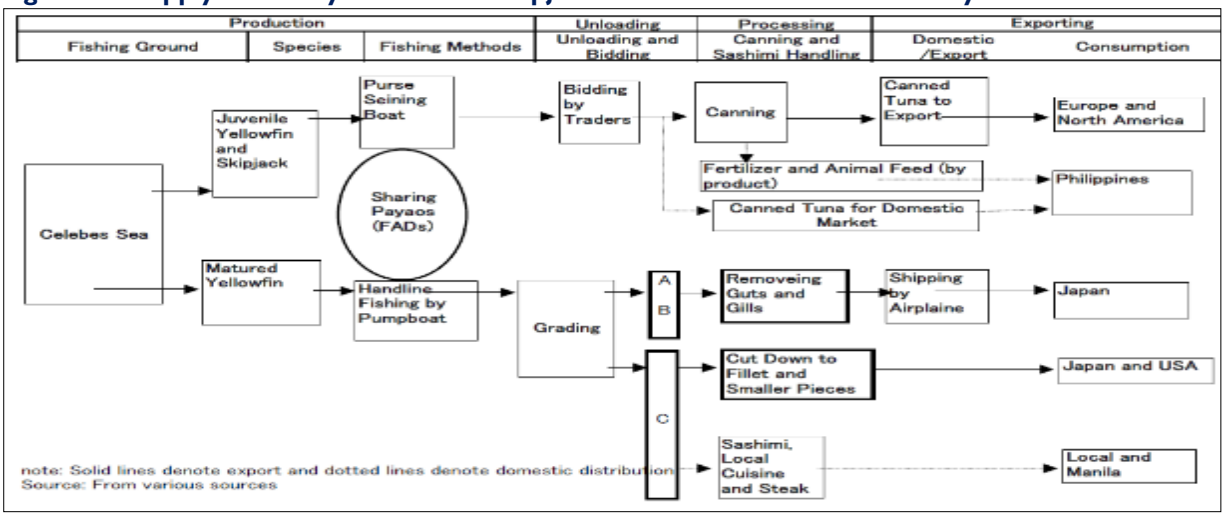
Sources: Barut and Garvilles 2016, RD Tuna website, CDO Foodsphere website, TCAP 2015

3.2.4 Supply Chain of Tuna Productions in the Philippines

Yamashita and Belleza (2008) reported the internal value chain of the canned tuna industry with focus on the first stage of production until the shipment to domestic and/or export markets. The authors presented a picture of supply chain of skipjack and yellowfin tuna that landed in General Santos City and utilized for both sashimi and canned tuna production (Figure 11). A simplified supply chain of tuna products in the Philippines is also presented by van Duijn et al (2012) as shown in Figure 12.

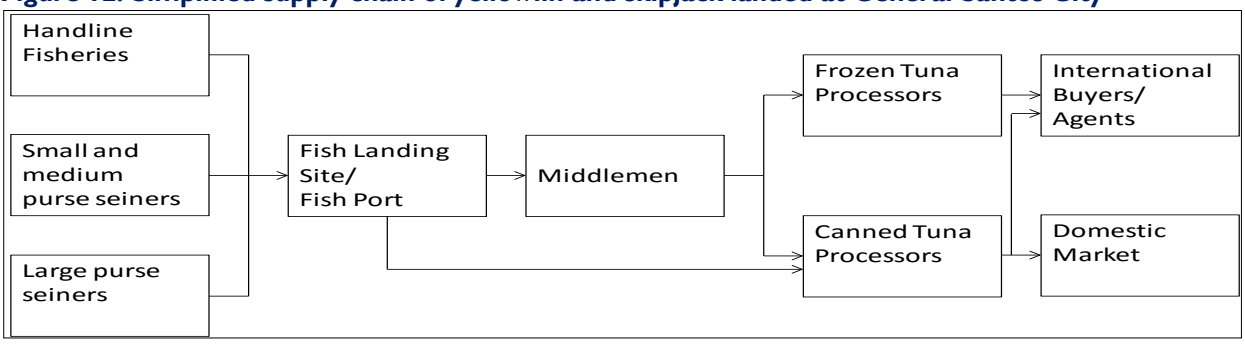
Tuna product marketing and sales have been reported to be unique in that most companies do not conduct intensive advertising and instead rely on long-term relationships with clients, participation at international trade fairs, joint ventures with marketing company abroad and spot buying. For example, most canned tuna products are sold abroad, with little competition in the domestic market. The products are sold abroad as "Made in Philippines" without company or brand names. All canneries meet the entire international requirements such as Hazard Analysis and Critical Control Point, Good Manufacturing Practice – Sanitation Standard Operating Procedures, Dolphin safe, Halal certification and Kosher certification (Yamashita and Belleza 2008; Briones and Israel 2014).

Figure 11. Supply chain of yellowfin and skipjack landed at General Santos City



Source: Yamashita and Belleza 2008

Figure 12. Simplified supply chain of yellowfin and skipjack landed at General Santos City



Source: van Dujin et al 2012

Existing reports identify value chain issues to be cost efficiency amid high import tariffs, decreasing supply of tuna/products, market expansion and market segmentation, as well as competitiveness as indicated by food safety and compliance with international standards. Based from these available reports on the Philippine tuna value chain, more than simply identifying the actors and their roles/activities there is a need to look into the enabling mechanisms/environment of individual commodity value chains.

3.3 Gender in the Philippine Tuna Industry

The few studies specific to the Philippines' tuna value chain have scant reference to gender issues (Vera & Hipolito, 2006; Zaragoza, Pagdilao & Moreno, 2004). The work of Vera and Hipolito (2006) provides a glimpse of women's involvement in the value chain, which is predominantly in preparations and processing. Wives of low-income fishers are noted as assuming the task of seeking loans to ensure the daily needs of the family while the husband is away for several days on deep-sea fishing trips. Fishing operating expenses (including food) are already covered by the financier who is usually the boat owner, however, when the catch is not enough to cover the loaned amount, the women are the ones who are left indebted to the financier-buyers (Vera, 2002). Women are also employed, particularly by canneries, for processing activities.

Women are prominently placed in the processing stage of the value chain, with commercial canneries employing mostly women (FFA, 2006). The tuna canning industry in General Santos City employs almost 8,000 workers and is one of the city's biggest private sector employers (Vera & Hipolito, 2006). Most of the cannery workers

are aged 26-30 years old, are high school graduates and are either from the southern Philippines or migrants from the Visayas region. Most of them were hired through cooperatives and are contractual employees who are regularly renewed, based on individual performance and the needs of the company. The workers consider the canning industry as one of the best employers based on salary, job tenure and other benefits. They receive health insurance through Philhealth and Social Security System premiums and some who can work longer hours earn more than the minimum wage. Despite these benefits, there is high turnover especially of employees in the production department. Here, employees who are mostly women need to stand for twelve hours in order to clean and prepare the tuna for canning. Most of those who resign are commonly young, single women who have other job options as compared to married and older women workers who may have more limited options.

Women are also employed in the trading and marketing portion of the value chain (Lambeth et al, 2014: 27). Women perform marketing-related tasks and other administrative work in the tuna industry and other industries closely linked to the tuna value chain. These services include business services for the industry, government and non-government agencies, which are interested in promoting sustainable fisheries management.

Literature from other countries shows that gender roles in Philippine fisheries are similar to those in other countries. In the Pacific, data shows that women are rarely involved in the harvesting sector of the tuna industry. Weeratunge (2012: 12) notes that the few women who have roles are most likely to be the boat owners rather than the crew or captain. In the Fiji tuna industry, the women are employed in the offices and workshops while the men are skippers, engineers, crew on top of being boat owners, office workers and in workshops. Women are largely low-paid rather than in managerial or supervisory positions. In the Solomon Islands, no women are employed as crew on industrial tuna fishing vessels though there are cases of women working as government observers on vessels (Krushelnytska, 2015: 6). Men are most commonly found in the capture and commercial marketing areas (FFA, 2006). Women's participation is limited by her social and domestic reproductive obligations as well as the traditional beliefs that fishing is a man's world. In terms of processing, 30% to 80% percent of cannery workers and other tuna processing establishments in Fiji are women processors, while in Solomon Islands, 26% of the workers are women fish processors (Arama, 2000 and Nelson and Tuara, 2000 respectively, as cited in Lambeth 2014: 25).

Due to the dearth of information about gender roles within the Philippine tuna industry, the research undertaken for this study aims to provide better knowledge about the involvement of men and women in the tuna value chain.

4. RESULTS

This chapter presents the results of in-field research, including the conducted surveys, key informant interviews, and focus group discussions—together with desk-based research and literature reviews. Research findings aim to identify the gender differentials along the value chain, including the opportunities, constraints and needs, and the enabling environment, which affect and impact men and women differently.

4.1 The Gendered Tuna Value Chain of General Santos City and Sarangani Bay

There are many steps between the time that tuna is caught until it is processed and distributed for consumption, both locally and abroad. At each step along the tuna value chain, there are activities, players and resources that produce an output. Enablers, comprised of local government units and agencies, institutions and development organizations, provide the support and environment needed by the enterprises along the value chain.

From the research and validation workshops conducted, WINFISH developed three value chain maps that identify gender differentials in access, roles and opportunities/constraints of men and women in the various value chain nodes. These maps are for the municipal fisheries (small-scale), the commercial handline fisheries, and the purse seine (large-scale).

These maps answer questions like:

- Where are the men in the tuna industry and in efforts to manage tuna resources? Where are the women?
- Who does what? When, where and how?
- Who gets what? Who has access to resources?
- Who decides/controls what? Why?
- Who benefits? How much?
- What are the opportunities/constraints for women? For men?
- How can men and women participate in EAFM and CDT programs?

Studying the tuna value chain with a gender lens can:

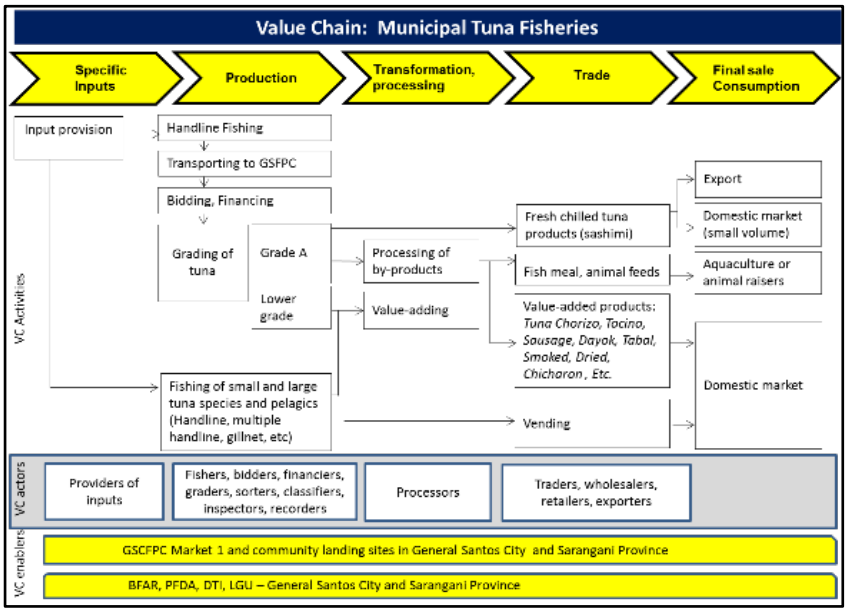
- help determine the role of women in CDT and EAFM initiatives;
- enhance chain productivity through greater allocation of economic resources to women;
- improve women's economic empowerment through opportunities to make economic decisions; recognize and address women's needs, thus, contribute to her work efficiency; and
- recognize the value of women's work and her economic contribution to the tuna fisheries value chain.

Gender-responsive value chain analysis also strives to identify additional work opportunities for women, promote women's engagement in knowledge transfer and implementation of interventions, promote gender equity in the work place, promote more leadership positions for women entrepreneurs, and create a space for women's voices as partners for inclusive development.

4.1.1 Municipal Fishers

Most of the fishers in Kiamba and Glan are municipal fishers. They fish for tuna-like species and sell their products to small-scale processors such as those who process tuna chorizo, tuna sausage, smoked tuna, dried tuna, and tuna chicharon for the domestic market (Figure 13).

Figure 13. Value Chain Map for Municipal Tuna Fisheries



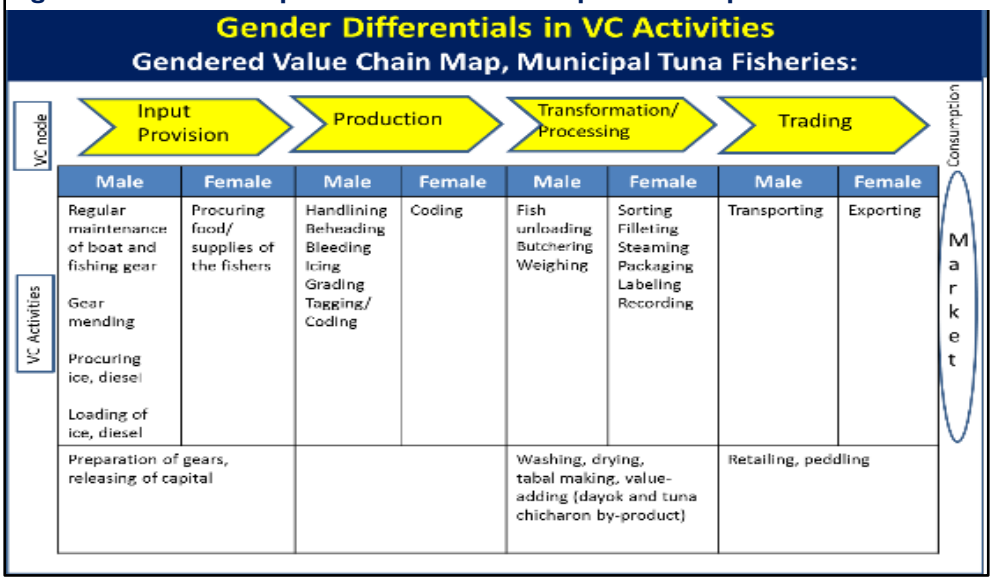
Source: WINFISH, GRVCA Workshop, January 2017

Figure 14 illustrates the roles of men and women and the corresponding activities and relationships that exist in the municipal tuna fisheries value chain. Men do the physically-demanding work from input provision to production, processing and trading. For small-scale fisheries, men procure and load the ice/diesel to the boat and do the regular machine maintenance. After catching the fish, men behead, ice, grade, bleed and tag/code the fish. Men unload, butcher, weigh and transport the tuna product.

Women, on the other hand, are predominantly focused in the procurement of food provisions and other supplies/paraphernalia to be used by fishers. Women do the coding, filleting, sorting, recording of sales, steaming, packaging, labeling and do paper processing for the tuna products' exportation.

There is shared work and these are observed to be light tasks such as the preparation of gears, releasing of loan money for capitalization, washing, drying, and value-adding which includes the processing of tuna by-products into *tabal, dayok,* and *chicharon*, among others. These tasks likewise serve as bonding time for couples.

Figure 14. Gender-responsive Value Chain Map for Municipal Tuna Fisheries



Source: WINFISH, GRVCA Workshop, January 2017

Key Findings

- In municipal fisheries, men are involved in catching and fish production while women are in post-harvest, but with significant overlapping roles along the value chain.
- Overlapping roles are more pronounced in municipal fisheries where many activities are carried out as family labor.
- The multiplicity of women's burdens at home and in peripheral (often irregular), fishing-related work further make women vulnerable to the impacts of low fish catch and low market prices of fish products.

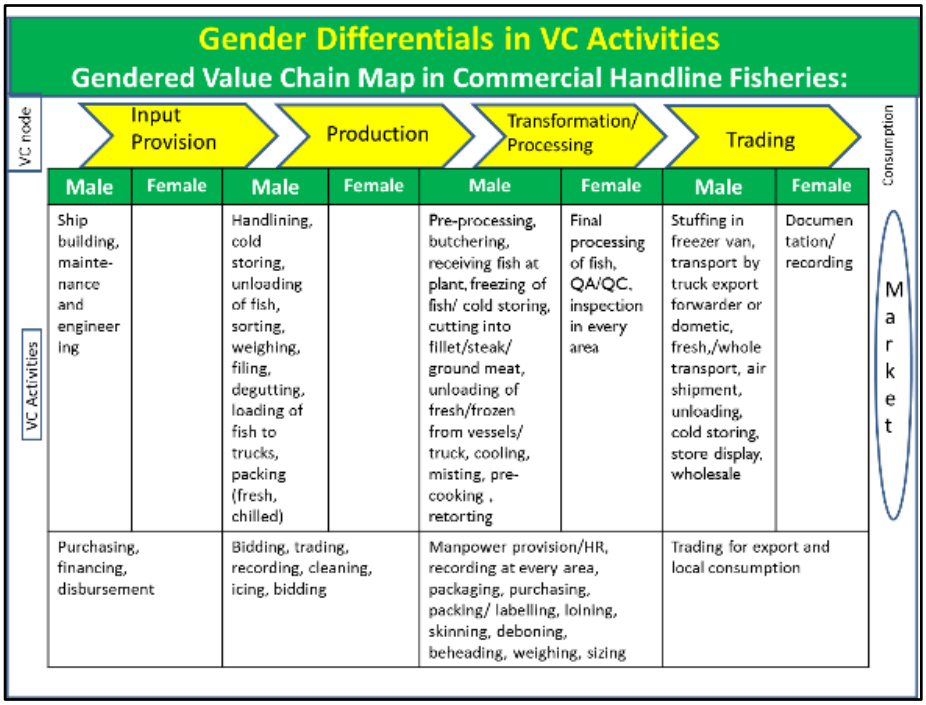
4.1.2 Handline Fishers

For the commercial handline tuna fisheries, production involves the actual fishing, loading/unloading the catch at the GSFPC, bidding, financing, which are followed by weighing, grading and labelling. It was observed that the differentials in activities between men and women are more pronounced in commercial handline fisheries than in the municipal fisheries. Men have many more roles than women in this value chain. In input provision, men build boats/ships, take charge of welding tasks, and do the actual fishing. Once the fish are caught, men unload the catch, weigh, degut, pack (fresh or chilled), and load the tuna into the trucks (Figure 15).

In the succeeding VC node, men are involved in pre-processing, butchering, receiving the fish at the plant site, freezing the fish and cold storage, unloading of fresh/chilled/frozen fish from vessels/trucks, cooling, misting, pre-cooking, and cutting into fillet/steak or grinding the meat. Men also do the stuffing of fish inside the freezer vans, loading/unloading for export (air shipment, and forwarders), cold storage, and store display. Women's work is limited to sorting, inspection, quality control, documentation and recording for exports/sale.

There are also shared work which include recording, packaging, purchasing, among others. These take place mostly in the processing/transformation VC node.

Figure 15. Gender-responsive Value Chain Map for Commercial Tuna Handline Fisheries



Source: WINFISH, GRVCA Workshop, January 2017

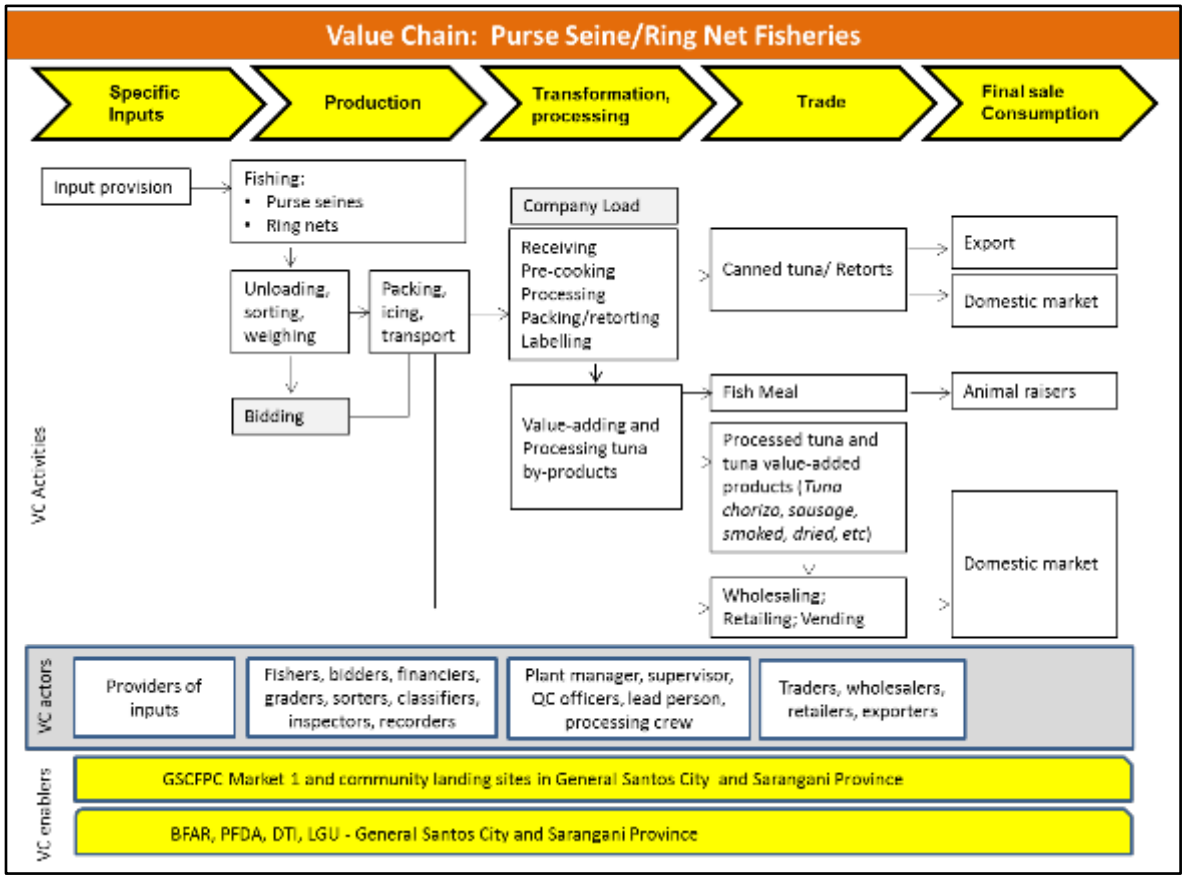
Key Findings

- In commercial handline fisheries, women's participation is limited to final inspection for quality control, documentation, and reporting/recording.
- There are no women fishing crew members. Participation is limited by beliefs and practices of a traditionally male-dominated fishing sector.
- There are overlapping roles, but these are mostly light tasks which women do as an extension of their housework such as disbursements, purchasing/marketing.

4.1.3 Purse Seine Fishers

For the purse seine/ring net tuna fisheries, after the catch is unloaded, sorted and weighed, the product is packed, iced and transported to the company/processor which receives, pre-cooks, processes, packs/retorts and labels the processed tuna product for shipment as canned tuna/ retort for export (mostly) and the domestic market, in small volume (Figure 16).

Figure 16. Value Chain Map for Purse Seine Tuna Fisheries



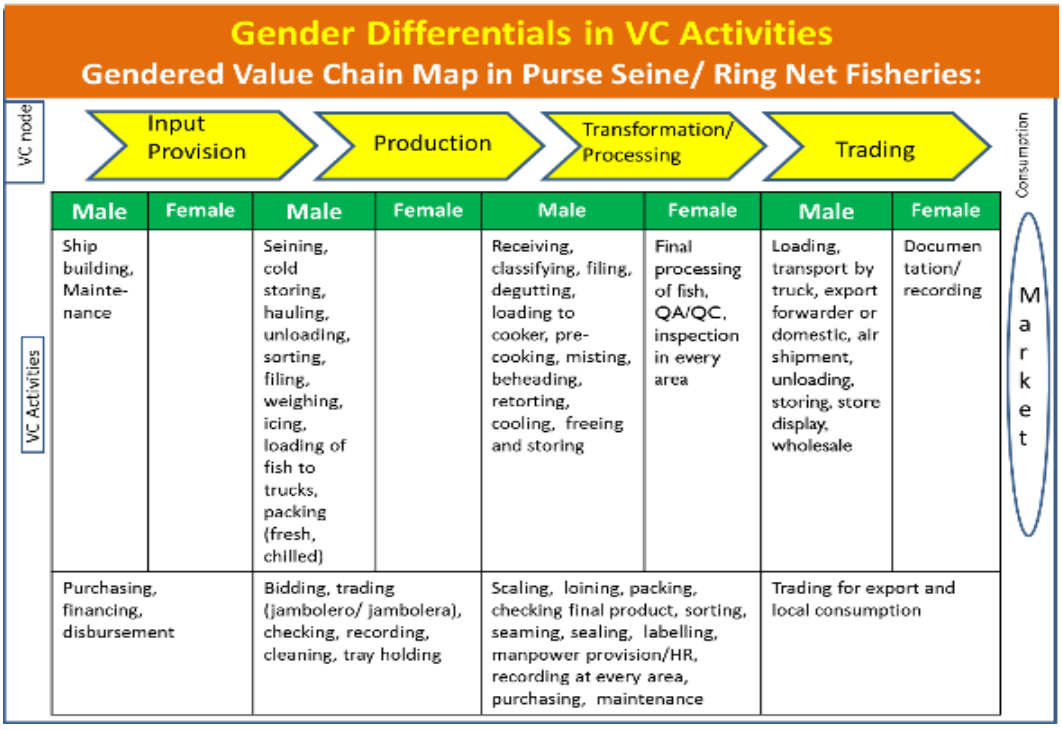
Source: WINFISH, GRVCA Workshop, January 2017

The catch can likewise be subject to bidding before it is packed and goes the path for company load. The tuna by-products from the companies/canneries are processed for added values, such as chorizo/sausage/smoked/fried, or as fish meal. The former is sold wholesale, retail, or are peddled and sold in the domestic market. The by-products are processed into fish meal, too, and are sold wholesale/retail to farmers or livestock owners.

Similar to the commercial handline fisheries, women's participation in purse seine fisheries is limited to the VC nodes of processing/transformation and in marketing/trading (Figure 20). Women are preferred in processing plants for their being detail-oriented, and perseverance in standing for long hours in assembly lines. They are also preferred in marketing tasks since they are believed to be patient in the negotiating table. Women are discouraged from working in cold storage since they are perceived to be physically weak. Moreover, it was observed that women are found in intermediary tasks in post-catch landing tasks such as *jambolero,* tray holders, and checkers.

The men perform the more physically demanding tasks as well as almost all of the input provision and production activities. Shared roles are in the work sphere, and these are tasks that are reflective of shared tasks at home such as cleaning, recording, and purchasing.

Figure 17. Gender-responsive Value Chain Map for Purse Seine Tuna Fisheries



Source: WINFISH, GRVCA Workshop, January 2017

Key Findings

- In purse seine fisheries, men dominate in production, but women dominate the processing, trading, and post-catch activities.
- There are shared roles at work and these mirror the overlapping home tasks between men and women.

4.2 Actors in the Tuna Value Chain of General Santos City and Sarangani

4.2.1 Municipal Fishers

Socio-demographic Profile of Fishers

Male and female respondents were drawn from municipal and commercial fishers, with the latter composed of handline and purse seine fishers. Respondents for handline fishers consisted of vessel owners, boat captains and crew. Table 10 shows the sample distribution of 105 survey respondents drawn from each scale of fishing operation.

Table 10. Frequency distribution of respondents

Gender/ Scale of fishing	Female		Male		Total	
	No.	%	No.	%	No.	%
Municipal fisheries	11	47.8	12	52.2	23	100
Commercial fisheries	36	50.0	36	50.0	72	100
1. Commercial Handline Owner	6	40.0	9	60.0	15	100
2. Commercial Handline boat captain	9	42.9	12	57.1	21	100
3. Commercial Handline crew	21	58.3	15	41.7	36	100
Purse Seine	4	40	6	60	10	100
Total	51	48.6	54	51.4	105	100

The respondents from municipal fisheries and handline crew consisted of a sample of male fishers and an independently-drawn sample of fishers' wives. There were no women in the sampling frame who actually engaged in fishing; thus, the study selected fishers' wives to provide perspectives of women on the lives of fishing households, from which gender differentials may be detected. Wives responded to questions related to fishing income and operations based on their knowledge of their fisher-husbands' situation; however, other questions on participation, beliefs, knowledge and use of time are based on their own personal experience.

The 23 municipal fisher-respondents included boat owners (10), boat owner-operators (5), boat captain-operators (6), and crew (2), where 47.8 percent were females and 52.2 percent were males (Annex 1-1). For the commercial fisher-respondents, boat captains and boat owners were mostly males, 12 out of 21 and 9 out of 15, respectively. Boat-captain-operator was the designation of six out of 10 purse seine respondents, more than half of which were males. The respondents' demographic and economic characteristics are described as to age, educational attainment, residence and ethnicity, and income (Annex 1-2).

Age and Civil Status

The mean age range of respondents was 39.8 to 45.8 years old, with female respondents slightly older than the male fishers—except among handline boat captains, where the males were about five years older than the females. Except for few male municipal fishers and handline owners, all the other fishers were married.

Educational Attainment

Among the respondents, the male municipal fishers had the lowest median educational attainment of 'some grade school' followed by the handline crew with 'grade school graduate.' Wives of these two aforementioned groups reached higher levels at 'some high school.' The male handline owners had the highest level at 'college graduate' When asked about the education of their spouses, the pattern of response generally appears consistent with the aforementioned self-reports of respondents' education. For example, male purse seiners

had spouse median education at 'college graduate', which is only slightly lower than the median education reported by wives in purse seine group.

Residence and Ethnicity
The male respondents had resided longer (28 to 30 years) in General Santos City, compared to the female respondents (11 to 29 years). For both males and females in all groups, the largest ethnic affiliation is for the Cebuano-Bisaya group.

Income from Fishing
The median income reported by female respondents was lower than male reports, except for the reverse among handline owner and purse seine respondents. In municipal fisheries, males earned P5,000 per month from fishing compared to P4,063 earnings of their female counterparts. A similar pattern is observed among commercial handline where boat captains earned P15,000 and wives earned P11,875; and handline crewmen earned P6,072 which was almost twice as high as wives' earnings at P3,688.

On the other hand, among purse seiners, males earned P15,000 compared to their female counterparts who reported P20,000 monthly incomes. Female commercial handline owners earned higher (P40,000) than the males (P33,333) from fishing activities.

Key Findings

- Among the different types of fishers, the male municipal fishers had the lowest educational attainment (having some grade level of formal schooling). Those with highest educational attainment were male handline owners, having graduated from a college degree.
- Ethnic affiliation is largely Cebuano-Bisaya.
- Males generally earn higher incomes than the females with the biggest differential among commercial handline fishing.

Six Domains of Gender Analysis

Access to Assets
When asked how their boats were obtained, 42 percent of male municipal fishers cited 'self-finance' while only 27 percent of the corresponding females said so, with more of the wives (55%) crediting 'loans' as source of boats (Table 11). On the other hand, female handline owners acknowledged more 'self-finance' than loans compared to their male counterpart. The majority in the three other categories cited 'self-finance' as the mode of acquisition.

Table 11. Percentage who acquired assets, by mode of acquisition, sex and respondent type

Respondent / Boat purchase	Municipal fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Self-Finance	27	42	50	33	89	92	52	80	50	67
Borrowing, loans	55	33	33	44	0	8	5	7	0	0
Gear										
Self-Finance	36	58	83	67	67	83	57	67	75	50
Loan	55	8	0	11	0	0	0	0	0	0

Operations										
Self-Finance	55	75	67	78	78	100	48	73	75	50
Loan	27	8	0	11	11	0	10	7	0	0

In the acquisition of fishing gears, the majority, regardless of gender, reported 'self-financing'. Only female municipal respondents reported that 'loans' were the majority means of acquisition, especially when there are cash shortages for fishing operations. Three male respondents reported 'assistance of government' and two females cited 'buyer-financed' acquisition of fishing gears.

For the cash needed to finance fishing operations, 'self-finance' was the dominant response for all respondents, although 27 percent of municipal fisher wives credited 'loans' as the source of the cash. Among crew respondents, 43 percent of females answered that they did not know the source of financing.

For the majority of respondents, workers were reported as being hired through personal contact, as opposed to advertising. Except among purse seine respondents, almost all male and female respondents reported that owners are able to hire workers when they are needed 'within a day,' indicating that labor is readily available in their area. Purse seine respondents said it took at least a week or longer, possibly, because purse seine operations seek workers that are more experienced.

'Experience' and 'other fishers' are a common source of information about new fishing practices for both males and female respondents. Three respondents mentioned LGUs, and television and radio were the least cited sources of information. The most prominent choice of respondents for information on market prices is firstly buyer, followed by either fishport or financier.

The major buyers are wholesalers and, to a lesser extent, the financier. Female respondents reported that 20 percent of buyers are females, while the men gave a higher percentage of 35 percent. Both genders concur that males generally bring the tuna to the buyer although it is not uncommon for buyers to get the fish from the landing site. About 70 percent of all respondents, regardless of gender, do not allow credit for their fish because they need the cash for their fishing operation. Of those who said they were willing to allow credit, the most generous were the female municipal respondents who had an average 62 percent of women as their debtors.

Key Findings

- Both female and male municipal fishers reported that the majority funds required for the purchase of boats, gears, and maintenance of fishing operations are self-financed. When there are cash shortages, women resort to loans.
- Respondents rely on one's own experience and other fishers' practices for information on fishing practices. Very few cited government entities or the television/radio as sources of information, highlighting that there is a lack of available and accessible information on improved fishing technologies.
- Respondents rely on buyers, fishport actors, and financiers for information on market prices. There was no report of the use of real-time databases.
- The majority of buyers are reportedly wholesalers, followed by financiers.

Knowledge, Beliefs and Perception

To assess the gender-related perceptions of the respondents, participants were asked to agree or disagree to various statements (Table 12). Almost all respondents unanimously agreed that 1) male buyers 'pay more promptly than women buyers' (except purse seiners who mostly were neutral) and 2) that women buyers are: 'easier to deal with than male buyers' (except female handline boat captains and female purse seiners); 'more particular about fish quality' (except handline owners who disagreed); and 'easier to collect payment from than male buyers.' There was less consensus on the statement that 'male buyers offer better prices than women buyers.' Municipal fishers agreed with this statement, the handline crew disagreed, and the rest had dissimilar answers. There were no statistically significant differences in the perception of males and females for each type of fisher respondents.

Table 12. Percentage who gave dominant response to belief statements

RESPONDENT	Municipal fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Men buyers offer better prices than women.	46 (A)	33 (A)	50 (A)	33/33 A/D	44/44 A/D	41.6 (D)	42.9 (D)	66.7 (D)	50/50 N/D	50 (A)
Women buyers are easier to deal with than men buyers.	81.9 (A)	66.7 (A)	50 (A)	66.7 (A)	55.6 (N)	58.4 (A)	76.2 (A)	100 (A)	50/50 A/D	100 (A)
Women buyers are more particular about quality of fish than men buyers.	81.8 (A)	75 (A)	66.7 (D)	66.7 (D)	66.6 (A)	58.3 (A)	52.4 (A)	73.4 (A)	50 (A)	66.7 (A)
Men buyers pay more promptly than women buyers.	45.5 (A)	60.6 (A)	75 (A)	44.4 (A)	100 (A)	75 (A)	57.1 (A)	46.6 (A)	50 (N)	50 (N)
It is easier to collect payment from women buyers than men buyers.	54.6 (A)	66.7 (A)	50 (A)	66.6 (A)	Equal all categories	75 (A)	47.6 (A)	80 (A)	50/50 equal A/N	50 (A)
Women are encouraged to join fishing trip.	64 (D)	92 (D)	83 (D)	89 (D)	100 (D)	100 (D)	86 (D)	93 (D)	75 (D)	100 (D)
Pregnant women on board bring bad luck.	81.8 (D)	75 (D)	100 (D)	88.8 (D)	66.6 (D)	75 (D)	85.7 (D)	73.3 (D)	100 (D)	83.3 (D)
Women who have their monthly period bring good luck to fishing trip.	90.9 (D)	83.3 (D)	100 (D)	77.7 (D)	88.9 (D)	61.6 (D)	85.7 (D)	60 (D)	75 (D)	66.6 (D)

[1] *A notable percentage gave neutral response. (Legend: A- agree; D- disagree; N- neutral)*

In general, attitudes towards women were found to be positive, including that women buyers are easier to deal with than male buyers, are generally more particular about fish quality, and are easier to collect payments from than male buyers. On the other hand, respondents perceived that men buyers offer better prices than women buyers and that they pay more promptly. This combination of characteristics seems to show that women might be more shrewd than men when it comes to fish trading.

A large majority (64-100%) disagreed with the statement that 'women are encouraged to join fishing trips.' Men tended to disagree more, with 89-100 percent of respondents believing that women are not encouraged to join fishing trips. The lowest percentage of disagreement (64%) were by female municipal respondents, which may indicate that there may be some environmental sources of encouragement. FGDs revealed that women do not

go fishing because women think they are not capable of fishing, they are afraid to go out to sea, and they have some reservations (e.g., they get dizzy, they cannot swim, they are afraid of sharks). Similarly, family members discourage women from fishing and expect them to remain at home to attend to household matters. Also, women themselves feel they are not capable of doing such jobs because of the physical demands, perils at sea, and household duties, among other factors. One female participant claimed that she had always wanted to be a commercial fishing boat captain but did not have the opportunity. Her example demonstrates that some women do want to become fishers but are constrained by aforementioned beliefs and gender roles.

Do enabling agencies encourage women, who so wish to go to sea? In the KIIs, enablers (BFAR, PFDA, Office of City Agriculturist, Office of Provincial Agriculturist) stated that their trainings for fishers are open to both men and women, however the trainings cited were for law enforcement, seaweed culture, post-harvest and value-adding. As a practice, they disseminate information to all, regardless of sex, but content is generic with no materials that necessarily target women. However, as almost all fishers are men, information that pertains to the technical aspects of actual fishing may not reach women. One respondent from an enabling agency respondent said she does not encourage women to fish for a variety of reasons, including that they need to attend to their children, culture norms in Muslim areas dictate that a 'woman is a housewife' and that it is not acceptable for them to go fishing even if they are physically able, and because there are security concerns at sea, where women will be working amid men, because "males think differently."

With regards to knowledge on tuna species and fishing regulations, there was no statistical difference between males and females (Table 13). Notable findings included a low level of awareness for the 'legal size of purse seine nets' (Item 3) and the requirements for the 'registration of purse seine required by the city' (Item 4).

Table 13. Percentage who gave correct response to the statement

RESPONDENT	Municipal fisher		Commercial Handline Owner		Commercial Handline boat captains		Commercial Handline crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
1. Tuna is a migratory fish. (True)	90.9	100	0	0	77.8	100	90.5	93.3	100	100
2. Commercial fishers are not allowed to fish within 15km municipal water. (True)	90.9	75	83.3	100	100	100	76.2	86.7	100	100
3. The legal size for purse seine nets to catch tuna is 3cm. (False)	36.4	25	66.7	33.3	55.6	58.3	57.1	40	0	33.3
4. The city government requires the registration of purse seine. (False)	9.1	25	16.7	11.1	55.6	0	23.8	40	25	0
5. Skipjack is a kind of tuna. (True)	63.6	58.3	66.7	55.6	77.8	33.3	81	60	75	83.3
6. A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area. (True)	63.6	66.7	50	66.7	55.6	66.7	52.4	60	100	100
7. A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets. (False)	63.6	83.3	50	77.8	44.4	75	66.7	66.7	75	83.3
8. To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish. (True)	54.5	58.3	50	66.7	88.9	75	61.9	80	75	83.3

Key Findings

- There were no significant statistical differences in the beliefs of males and females for each type of fisher respondent.
- In general, attitudes towards women buyers are positive, showing that women are perceived to be shrewder than men when it comes to fish trading.
- A greater percentage of male than female respondents believe that women are not encouraged to join fishing trips. Little to no encouragement if given to women by family and external agencies because of beliefs about women's household roles, women's possession of the appropriate skills and stamina that are compatible with fishing, and their physical security of women.
- Cultural beliefs about certain female conditions that bring bad luck to fishing still prevail and discourage women from fishing or boarding fishing boats.
- Despite the prevalence of these beliefs, there are a few female respondents who expressed openness to going to sea themselves.

Practices and Participation

Of the 29 tasks related to municipal fishing operations, men dominate as the usual doers of each task (Annex 1-3). These tasks include: planning the trip, preparing the nets and accessories, operating the boat engine, searching for fish, setting the net/gear, diving, hauling the net, unloading the catch, ice storage, and transporting to the buyer.

In commercial fisheries, men dominate the same types of tasks and others that include weighing, grading, and beheading the fish. Boat captains also prepare the food and water for the crew, the boat, and the equipment for the fishing trip. For those in purse seine, tasks for the males are similar, with the addition of boat inspection and diesel procurement.

Women were the main actors in the following municipal fisheries tasks: record-keeping of finances, payment of salaries and bills, and recording of catch. Other tasks where women were notably involved, although cited by a minority of respondents, included receiving payments, processing legal documents, preparing food, sorting catch, negotiating with buyers, and inspection.

Collected data confirmed literature findings that wives of municipal fishers are more involved in pre- and post-fishing activities. Compared to wives of fishers in the commercial sector, women in municipal fisheries worked more closely with their husbands in municipal fisheries. They performed preparatory trip tasks, such as preparing the boar, gear, and food and water provisions. When their husbands return from a fishing operation, they assist their husbands by sorting, unloading, weighing, and icing the catch. Conversely, in the commercial fisheries, post-capture tasks are usually done by hired male personnel, rather than the wives of crew. Women in the handline and purse seine groups perform the fewest tasks compared to those in municipal fisheries.

There are also differentials in the participation of women depending on the VC node where they are most visible. The wives of municipal fishers in Sarangani Province are more involved in pre- and post-fishing activities compared to their counterparts in General Santos City who are more involved in fish processing. Fishers' wives in Glan and Kiamba, for example, are adept in the construction of their husbands' fishing gears. In contrast, fishers' wives in General Santos City were more skilled, and hence, were involved in value addition. Women in General Santos City were observed to have less participation in the pre- or post-fishing activities with their husbands, and generally stayed at home to attend to household matters. This may be because fishers in Sarangani municipalities reside near the coast, allowing women easier access to the pre-fishing/post-fishing area. In

General Santos City, fishers often reside in areas quite far from the landing sites, thus wives do not have easy access to the workstation of their husbands. Furthermore, women in the city may have more opportunities/activities (economic, social, leisure, etc.) than their counterparts in Sarangani who, due to limited opportunities, have more time and motivation to participate in their fisher-husband's work.

Significant statistical differences were found for four tasks in regard to the percentages of men and women who are cited as usually performing the task:

1. 'Preparation of food' among municipal fishers: Significantly more females than males reported that women usually prepare food and water for the crew.
2. 'Procure diesel' among handline owners: Significantly more males than females reported that men procure diesel for fishing trip.
3. 'Receive payment' among municipal fishers: Significantly more males than females reported that men 'receive payments'.
4. 'Financial record keeping' among Handline-Crew: Significantly more males than females reported that women do financial record-keeping.

In terms of oversight, when asked about whether observers (CDT-related) joined their fishing operations, only 13 out of the total 105 survey respondents reported that observers have boarded their fishing boats to document catch (Annex 1-4). There were no reports of observers for neither the municipal or commercial handline fisheries. For most of the fishing groups, the majority did not experience having BFAR enumerators board their vessels either (Annex 1-5). The marked exception is the considerable assent of male handline boat captains and purse seine boat captain-operator, who are the likely officers to know about the BFAR presence. For commercial vessels, the appropriate landing certification of BFAR is needed to enable the fishing enterprise to export their catch; otherwise they sell locally. The experience reported by municipal fishers of BFAR enumerators boarding their boats may reflect the monitoring and recording activities under the National Stock Assessment Program.

In terms of the fishers' participation in activities and/or projects related to fishing, across all groups, more females than males reported having attended fisheries-related activities such as meetings, public hearings, trainings, socials, and committee memberships (Annex 1-6). Fishing-related projects noted by respondents included the community-based Coastal Resource Management (CRM), and the Bantay Dagat (Annex 1). The latter is (translated as 'sea guardian' or 'sea patrol') refers to community-based civilian volunteers organized under the Fisheries and Aquatic Resources Management Councils (FARMCs). Volunteers work with local and national government officials to patrol and keep watch over municipal waters, which is within 15 kilometers from shore, and to assist in enforcing pertinent fishery laws. Higher percentages of female handline-owners and male handline-crew acknowledged the existence of these projects (Annex 1-7). The lowest presence of these projects was reported among male municipal fishers (25%), female handline crew respondents (38%), and female purse seine group respondents (none). The researchers observed that reporting the presence of such projects would depend on whether respondents reside in a fishing barangay, which may not be the case for commercial fishing respondents.

Higher percentages of male municipal fishers reported being sometimes involved in meetings and coastal resources management (CRM) while the females in this group reported to be involved in CRM, socials and meetings. The largest percentages for 'never' being involved in projects/activities among both male and female municipal fishers were in training, committee membership, public hearings and *Bantay Dagat* (sea guardians). The involvement of handline crew may be compared to the municipal fishers, as their economic conditions are similar. Fewer male and female handline crew reported being 'sometimes' involved in meetings with a high percentage of 'never' for almost all activities. On the other hand, male handline owners and boat captains were reportedly sometimes involved in meetings and training. Females generally had lower involvement, if any. For purse seine respondents, both males and females 'sometimes' involved themselves in CRM while the males noted attendance in trainings, meetings and socials.

Gender differentials identified in the surveys were corroborated by the FGDs and further illustrated that differentials are due to the work-home time schedules, and the nature of work that is open to men or women vis-à-vis the type of fishing scale. When asked what types of activities are related to fisheries management, participants identified coastal clean-up/waste management, community work, Bantay Dagat participation, prohibition of destructive fishing practices, and mangrove replanting.

Table 14. Percentage of extent of involvement in activities in fisheries related projects

Respondent		Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline crew		Purse Seine	
		Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Meetings	S	55	58	33	78	67	67	43	33	25	50
	N	9	33	67	0	22	17	33	53	75	17
Public Hearing	S	27	8	17	11	11	8	10	13	25	17
	N	55	67	83	67	78	92	76	67	75	67
Training	S	9	17	0	56	22	42	33	0	25	67
	N	73	58	83	33	67	58	52	73	75	17
Socials	S	64	25	17	22	44	25	33	33	25	50
	N	27	42	33	33	44	50	43	53	75	33
Committee membership	S	0	17	0	11	0	83	19	0	0	17
	N	73	58	0	33	78	92	62	53	100	67
Bantay Dagat	S	0	0	0	11[1]	0	8	10[1]	13	0	17
	N	91	83	50	44	100	92	76	67	100	83
CRM	S	72[1]	66[1]	0	11	11	8	5	0	75	100
	N	18	17	17	44	78	67	62	67	25	0

[1] *includes those who answered in 'often' and 'always'. (Legend: S- sometimes; N- never)*

Most participants admitted very low participation in these activities, which confirms the general pattern of involvement from the survey results. FGD results further show the tasks expected to be played by men or women in as far as sustainable fisheries management (SFM) related activities are concerned (Table 15).

Table 15. Gender activities related to Sustainable Fisheries Management (SFM)

SFM-related activities	Who should participate	
	Male	Female
Bantay-Dagat participation	x	
Coastal clean-up/Waste management		x
Community work		x
Mangrove replanting	x	x
Prohibition of destructive fishing practices	x	
MPA management	x	

**Source: FGD, municipal fisheries sector*

Moreover, the FGD results showed that participation of women from municipal fisheries in community and social activities such as church matters, barangay health, attendance to Parent-Teachers Association (PTA) meetings in schools, and community volunteer works (Table 16). The men were expected to be (and are actually) involved in governance, political affairs, or legal representation. Neither men nor women were involved in fisheries policy formulation, either at the barangay, municipal or higher levels. Participation in fisheries management is very low; thus, they are generally not actively involved in protecting their legal rights from commercial fishing encroachment in municipal waters.

Table 16. Gender differentials in community and governance-related activities

Activities	Male	Female
Social and community affairs		
Church activities		x
Barangay health concerns		x
Parent Teacher Associations		x
Peoples Organizations	x	
Barangay/Community volunteer work		x
Political affairs/ Legal representation	x	
Fisheries policy formulation	x	
Boat registration	x	

Source: FGD, municipal fisheries sector

Key Findings

- Among municipal fishers, men dominate almost all tasks, except for record keeping of finances, making payments, and recording catch.
- In commercial fisheries, the tasks assigned to women are fewer compared to municipal fisheries.
- Only a third of respondents have experienced BFAR enumerators boarding their boats to document catch. Even more nominal are those who said CDT-related observers joined their fishing operations.
- There is low rate of involvement for both men and women in committee memberships, public hearings and *Bantay Dagat.*
- The extent of involvement of men and women vary as to the type of fishing scale which reflect the nature of work-home schedules, and the tasks open to men/women. Generally, males are the majority that reported having attended trainings/seminars. Females reported to be involved in CRM, socials and meetings.
- Female respondents in the municipal fishers group were more aware of fisheries-related projects than their male counterparts, reflecting the relatively closer involvement of women in community affairs.

Time and Space

In all groups, women spent an average of 7.0 to 8.5 hours on reproductive activities (e.g., house chores, food preparation, child care) compared to their husbands who spent 2.8 to 5.2 hours on the same activity type (Table 17). Men, on the other hand, spend 6.6 to 12.7 hours on productive (fisheries-related) activities with the highest average reported by handline boat captains, followed by male handline crew and municipal fishers.

Handline owners had the lowest at 6.6 hours. Wives of handline owners and handline boat captains worked productively for an average of 7.2 and 4.1 hours, respectively, while the rest reported 1.5 to 3.2 hours. Both men and women spent the least time daily on 'Community activities.'

Table 17. Average number of hours per day spent on activities, by gender and fishing scale type

Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Productive	9.9	3.2	6.6	7.2	12.7	4.1	10.9	2.1	9.3	1.5
Reproductive	5.2	7.0	4.7	7.0	2.8	7.4	4.1	8.3	4.7	8.5
Sleep/rest	7.7	11.0	10.0	9.0	7.5	11.1	7.5	10.9	9.7	12.0
Community	0	0	0.8	0	0	0	0.5	2.6	0	0
Leisure	1.2	0.9	2.0	1.0	1.0	1.4	1.0	2.6	0.3	2.0

Key Findings

- Men appear to be taking on more reproductive activities, compared to findings in other studies. Wives spend an average of 7-8 hours per day on reproductive activities, compared to 2.8-5.2 hours by the men in all the fisheries groups.
- Men spend 6.6-12.7 hours on productive activities, while women reported much fewer hours ranging from 1.5 to 7.2 hours per day, with the higher value being reported by wives of handline owners.
- Community involvement took up the least number of hours daily.

Legal Rights and Status

Both male and female municipal fishers, handline owners, and handline boat captains, as well as the males in the handline crew and purse seine groups demonstrated awareness of fisheries laws and policies. The lowest percentage claiming cognizance of laws were the female respondents among handline crew and purse seine fishers. This finding seems logical since wives do not necessarily need to know the fishing regulations as they are not directly involved in the fishing operations.

Common regulations cited were prohibitions against "fishing by commercial fishers within 15 kilometers" from the shore; use of dynamite and compressor; use of fine mesh net; catching undersized fish; and "going into waters of Indonesia." Respondents also cited checking-in with Coast Guard before sailing, using of correct gear, fisher and vessel registration, and protection of endangered species (e.g., sharks, dolphins, turtles). Male respondents cited additional provisions such as the delineation of municipal vs. commercial waters and national EEZ boundaries (i.e., fishers cannot fish inside municipal waters and Filipino fishers are not allowed to fish inside Indonesian waters), proper waste management, and age requirement for fishing crew in commercial fishing vessels.

In regard to the conditions under which fishers work and benefits they receive, there were no significant differences between male and female municipal fisheries respondents. Respondents reported that they *did not* receive:

- Social security coverage by the Social Security System;
- Philhealth membership;
- Leave benefits (not applicable to this group);
- Accident insurance (although 15% answered yes);

- Minimum wage (in the case of those being paid according to daily catch, earnings may exceed minimum wage);
- Protective clothing, eyewear, hand gloves; or
- Safe and separate sleeping quarters for women on board that will ensure private space for women.

Handline crew, despite being employed as commercial fishers, did not report considerably better benefits or resources. Among the groups, only purse seine fishers reported better conditions in terms of social security coverage, insurance and protective gear.

Key Findings

- More than half of most fishers' groups demonstrated awareness of some fisheries laws and policies, except for females in handline crew and purse seiners.
- Among the groups only purse seine fishers reported better conditions in terms of social security coverage, insurance and protective gear at work. Municipal fishers are least able to avail of legalized labor benefits because they can ill-afford these.

Power and Decision Making

The pattern of who makes decisions is largely similar across the different groups. For education and discipline-related decisions, 'both mother and father' were reported as the most prominent decision-makers in their households, followed by 'mother.' Mothers usually decide on food, budget and on community involvement (Table 18). Among municipal fishers, several cited that fathers also make the decisions, whereas other groups had zero responses for 'father' as decision-maker, specifically in leisure and community involvement among the purse seine respondents and in education and food among handline boat captains. There was no area in household decision-making where the husband was reported to lead in decision-making.

Table 18. Percentage of respondents who identify which parent makes the household decisions

RESPONDENT	Municipal Fisher			Commercial Handline Owner			Commercial Handline Boat Captain			Commercial Handline Crew			Purse Seine		
	Father	Mother	Both	Father	Mother	Both	Father	Mother	Both	Father	Mother	Both	Father	Mother	Both
Education	9	35	52	15	33	47	0	57	43	17	39	39	20	20	60
Food	22	44	30	7	87	0	0	95	5	6	75	17	10	80	10
Budgeting	17	61	13	0	93	0	5	90	5	11	81	6	0	80	20
Leisure	26	35	30	7	40	40	19	52	38	17	50	31	0	50	50
Health	30	30	30	7	53	33	14	62	24	47	56	22	0	60	40
Discipline	13	9	70	40	33	27	14	43	43	14	42	44	0	30	70
Community Involvement	17	48	26	7	40	47	5	62	33	17	67	11	0	80	20

In contrast, for decisions regarding fishing operations, most female municipal respondents named their husband-fishers as the decision-maker in most areas (Annex 1-8). The exception is in 'marketing of catch' wherein equal percentages (27%) of respondents identified wife (self) and husband. From the perspective of the male fishers, most (50% to 92%) attributed decision-making to themselves and hardly mentioned their wives as the decision-maker; even in marketing which is known as the woman's sphere. In pricing, marketing, hiring, and financing of operations, some male respondents noted that they defer to 'male co-worker.'

Table 19 summarizes the above results, by identifying the popular (at least 50% of respondents) response for each decision point. The entry 'mixed' under female column means that there are about equal percentages of respondents who referred to the Self (wife), husband and male co-worker as the decision-maker. This is notable in decisions on financing, marketing, and pricing particularly for the female municipal fisher respondent.

Table 19. Decision-maker based on majority response, by decision area and by gender

Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Purchase gear	H	S	H	S	H	S	H	S	M	M
Fishing area	H	S	M	M	H	S	M	M	M	M
Financing operation	Mixed	S/M	Mixed	S	M	S/M	M	S/M	M	M
Market fish	Mixed	S	H	S	M	S/M	M	S/M	M	M
Pricing	Mixed	S	M	M	M	M	M	S/M	M	M
Timing fish operation	H	S	H	M	H/M	S	M	M	M	M
Hiring	S/H	S/M	M	M	S/M	S	M	M	M	M
Total %	100	100	100	100	100	100	100	100	100	100

Legend: S – self; H – husband; M – male coworker; W – wife; S – self

Key Findings

- For household decisions, mothers generally decide on food, budget, and community involvement; both parents decide on education and discipline. Although fathers are reported to not be a decision maker in any area, their roles are particularly notable among the municipal fishers and handline crew.
- Most female respondents in the municipal fishers group recognize the husband as decision maker for fishing-operations, except in marketing the catch, in which they recognize the wife's participation as well.
- Most male municipal fishers attributed fishing-related decisions to themselves and seldom mentioned the role of their wives.
- The increased role of male co-workers and the low participation of wives is evident in the commercial fisheries groups.

4.2.2 Processors

The fish processing sector in General Santos City may be divided into two: (1) the medium- to large-scale, and (2) the micro- and small-scale fish processing enterprises. The medium- to large-scale enterprises include the six tuna canneries located in General Santos City and several processing plants that produce sashimi-grade and other frozen tuna products. The micro- and small-scale fish processing plants are either home-based or small-facility industries that produce tuna value added products (TVAP) such as tuna chorizo, tuna sausage, smoke tuna, fermented tuna products and tuna *chicharon* among others. Large-scale processing plants also engage in value adding to maximize the utilization of tuna byproducts.

Socio-demographic Profile of Processors

Socio-demographic profiles were developed through in-field surveys and FGDs. A total of 75 respondents who represented the three types of processors were surveyed: 20 from the canned (10 females, 10 males); 25 from the frozen processors (13 females, 12 males); and 30 from the TVAP (17 females, 13 males). There was a total of 40 females and 35 males (Table 20). The two FGDs that informed this section consisted of one all-male panel (4) and one all-female panel (6) and were comprised of regular employees of processing companies—most of which were supervisors. These respondents are characterized age, ethnicity, educational attainment, and income sources/levels, among others (Annex 1-9).

Table 20. Distribution of respondents, by sex and type of processor

Type of Processor	Female		Male	
	Number	%	Number	%
Canned	10	50	10	50
Frozen	13	52	12	48
TVAP	17	57	13	43
Total	40		35	

Age and Civil Status

The average age of canned processing respondents was 36 years for females and 34 years for males; 32 years old for females and males 33 years old in frozen processing; and for TVAP processors 44 years old for females, and 28 years old for males. The majority of respondents were married, except for the males in TVAP many of whom were still single. Co-habitation also seemed to be a common arrangement, especially for males and females in TVAP.

Educational Attainment

The majority of the males and females from the three types of processors were college graduates (43%), except the males working in TVAP where the majority were high school graduates. The males and females in the frozen products processing had the most number of years of education. Females had higher educational attainment than their male counterparts. Among the spouses, the majority were college graduates, except for the spouses of the male TVAP respondents most of whom were only high school graduates. This seems logical since spouses commonly find mates that are of relatively the same educational level.

Residence and Ethnicity

The female respondents from the three types of processors had lived in General Santos City much longer than their male counterparts. Females in TVAP have been living in General Santos City for an average of 27 years, compared to the males who averaged 13 years.

In terms of ethnic background, the majority (48 out of 75, or 64%) of the respondents were of Cebuano/Bisaya origin. There were also nine Ilonggos (12%) and three B'laans (4%). Other respondents were Ilocano, Maguindanaoan, Mranao, Tausug, T'boli, and Tagalog. The majority of the spouses (52%) were also of Cebuano/Bisaya origin. The average household size of the male and female respondents was four to five.

Income Sources and Levels

The primary source of income of the majority of the respondents' households (61 out of 75, or 81%) was fish processing (Table 21). A small number also reported income from fishing (2-3%), fish trading (3-4%), driving a tricycle (1-3%), repairing shoes (1-3%), operating a sari-sari store (2-6%), or other professions such as being a village/barangay official (3-4%).

Table 21. Number and Percentage (in parentheses) of household's primary source of income

Source	Canned		Frozen		TVAP	
	Female	Male	Female	Male	Female	Male
Fishing			1 (8)			2 (15)
Fish processing	10 (100)	8 (80)	11 (92)	11 (92)	13 (77)	8 (62)
Fish trading/selling					2 (12)	1 (8)
Profession		2 (20)			1 (6)	1 (8)
Tricycle operator				1 (8)		
Shoe repair						1 (8)
Sari sari store			1 (8)		1 (6)	
Total	10 (100)	10 (100)	13 (100)	12 (100)	17 (100)	13 (100)

Fish processing was reported as a secondary source of income for quite a significant number of respondents (18 out of 75). Females across the three types of processors had diverse secondary sources of income, particularly females in frozen processing who have the most diverse secondary sources of income (e.g. farming, remittance, business, pedicab driving, laborer and messenger). Overall, there were still many respondents (30 out of 75) who did not have secondary sources of income.

Half of the females from canned processing reported that they earned between P10,000.00 to P15,000.00 a month, while their male counterparts earned as much as P25,000.00 a month. In frozen processing, the majority of both males and females have monthly incomes of P5,000.00 to P10,000.00. In TVAP, the majority of both males and females earned P2,000.00 to P5,000.00 a month, but many of the females earned between P25,000.00 to P100,000.00 monthly. Considering all income sources, those with highest income that ranged between P30,000.00 to P100,000.00 and above were the females in TVAP. The majority of the males' income ranged between P2,000.00 to P15,000.00—fifty percent less than the lowest income of the females. In canneries, the majority of both male and female respondents' total household income ranged between P10,000.00 to P15,000.00, while in frozen processing, the majority of the females earned P15,000.00 to P20,000.00 and males earned between P5,000.00 to P 10,000.00 only (Annex 1-10).

Six Domains of Gender Analysis

Access to Assets

There were no reliable sources of information available on the total number of men and women that work in both large-scale and small-scale fish processing plants. In canneries, companies hire both regular and contractual employees. The number of contractual employees depends on the processing schedule and demand, and they are often employed by a Cooperative and are therefore not considered as employees of canneries. Most of the contractual employees are assembly line workers and most often women. Trainings availed of were on First Aid, leadership, fire drills, food safety, HACCP and problem solving. These were usually held at the processing plant.

Almost 80% of those who were working in the canning assembly line were women. Women have less access to physically demanding work which women believed only men could do such as loading and unloading heavy

things and activities related to cold storage. Work traditionally assigned to men includes weighing, loading, butchering, beheading, cold storage, *bodegero* (warehouse man), and retort operator.

Respondents reported that they received reliable information on new processing technology and practices from various sources. In the canneries, women reported that their primary sources of information were local trade fairs/food shows, and males reported government agencies and trainings. In frozen, the females received information from the trainings they attended, while men reported that they received information most commonly from the tuna industry association. In TVAP, the males' relied on their own experiences as sources of information, while the females usually joined local trade fairs and trainings to avail of information on updated processing technology. Women reported having limited access to commercial processing technology, but they expressed interest to know more about these technologies (e.g. boilers).

For buyer information, the cannery females reported that they received information most commonly from international trade fairs and the company administration, while the males cited the tuna industry association and the company administration. The males in frozen also identified international trade fairs and the company administration while majority of the females and males in TVAP said either they did not know or there was no source of information about buyers.

Key Findings

- Both men and women reported having equal access to trainings and capacity development offered by the company, as well as equal opportunities to occupy supervisory positions.
- Access to reliable information about the buyers was less diverse compared to sources of information on processing technology but common sources of information were the trade fairs, tuna industry associations and the company administration, which are accessed by men and women.
- A reliable source of information on market prices for canned and frozen was the company administration, according to both male and female respondents. While for TVAP, the supplier of fish provided information on market prices.
- Across all types of processors, a significant number of respondents did not know sources of information on market prices.

Knowledge, Beliefs and Perceptions

Respondents were not aware of catch documentation and traceability processes but opined that the supplier of tuna should have complete documentation. Men and women were aware of certain fishery laws that deal with different illegal fishing methods like dynamite fishing, use of fine mesh nets, and non-fishing in some parts of Sarangani Bay, which was a protected seascape. Some of more specific fishery management activities were also mentioned: close season, registration of fishing crew, wastewater management, tree planting, coastal clean-up and information and educational campaign materials such as flyers and brochures.

In terms of awareness of fisheries processing-related policies/laws, the majority of respondents reported awareness, particularly of the Good Manufacturing Practices (GMP) and the HACCP. The Philippine National Standard on Tuna Products has yet to be disseminated among the female and male laborers in the tuna industry. In addition, six questions were asked to canned, frozen and TVAP processors to measure their level of knowledge about tuna and fishery regulations (Annex 1-11). The average percentage of respondents who got the correct answers was 80 percent for both females and males, with females scoring slightly higher than males in the frozen and TVAP sectors.

Survey respondents were also asked to respond 'true/false' to a set of statements to determine their perceptions of the work of men and women in processing. In canned respondents, there was no significant

difference in the responses of males and females to the statements. In frozen, there was a significant difference in male/female responses to the statement that women are more efficient in processing than men. In TVAP there was also a significant difference in male/female responses to statement that it is easier to collect payment from women buyers than male buyers, indicating the perception that women buyers are indeed easier to collect payment from than men. Both men and women across the three types of processors perceived women to be more trustworthy than men on money matters. Moreover, women were more likely to experience sexual harassment in the workplace, as reported during the FGDs.

Key Findings

- The females in frozen processing and in TVAP had the highest and the lowest levels of knowledge (respectively) on tuna and fishery regulations.
- Almost all knew very well that processing plants need to be registered with the Food and Drug Administration and that the Philippine National Standard for processed tuna should be complied by all.
- With regards their gender-related perceptions, respondents in the frozen sector indicated that women were more efficient in processing tuna. In TVAP, respondents said that it was easier to collect payment from women buyers than men.

Practices and Participation

In processing, women are assigned to classifying, loining, packing, skinning and labeling. Women have been found to be slow when slicing tuna, but their output was better in terms of quality compared to men who were fast but the thickness of the tuna varied. Men were reported as being hired as *"extradors"* and were preferred for loining because they worked fast. Further, they could multi-task, so they earned more compared to women. Some respondents shared that men were "easier to deal with" than women, and that women were more difficult to talk with regarding pricing of tuna, while men could close deals faster. Table 22 shows the top five activities commonly done by men and women in the three types of processors.

Research revealed several differences between the restrictions and beliefs of male versus female employees. For example, in one processing plant, women who were more than three months pregnant were not permitted to work in the assembly line due to the risk posed by slippery and wet floors. During the FGDs with processors in canneries, it was reported that when a woman was absent from work it was likely because of a sick child that needed to be cared for, while if a man was absent then it was more likely that he was drunk the night before. Further, women are responsible for household budgeting, and if income is insufficient, the woman is tasked to borrow since she did the budgeting. Further, if she borrowed, all funds would go toward the household needs, but if it was the man who accessed credit, some amount went to cigarettes or liquor.

Table 22. Top activities of men and women, by type of processor

Male	Female
Canned	
1. Storage	1. Payment of salaries and bills
2.Maintenance of equipment, machines and infrastructure	2. Receive payment
3. Pack in carton	3. Record financial transactions
4. Prepare the equipment and facilities	4. Record of sales
5. Freezing; purchase of raw materials	5. QA and quality control
Frozen	
1. Storage	1. Payment of salaries and bills
2.Maintenance of equipment, machines and infrastructure	2. Receive payment
3. Operate equipment	3. Record sales

4. Behead	4. Quality assurance
5. Remove guts and gills	5. Labeling
TVAP	
1. Cutting/Slicing	1. Process Registration and Legal Documents
2. Pack In Cartoon	2. Hiring of Workers
3. Storage	3. Plan Production Schedule
4. Clean And Maintain Physical Facilities	4. Record Financial Transaction
5.Maintenance Of Equipment, Machines And Infrastructure	5. Payment of Salaries And Bills

The majority of the canned and frozen respondents said that their processing facility was registered with the Food and Drug Administration (FDA); while TVAP respondents said their facility was not registered. Further, according to the majority of respondents, all three types of processors were registered with either the Department of Trade and Industry, Securities and Exchange Commission and the Local Government Unit. These were registered in the name of the corporation for both canned and frozen, which was usually headed by a male president, while the majority in TVAPs were registered in the name of the female owner. All respondents in frozen affirmed that their facility was HACCP compliant, and the majority of canned respondents reported the same. In TVAP, responses were mixed and conflicting.

In terms of primary buyers, respondents from the canned sector reported having more male exporters than female. Frozen and TVAP respondents sell to small-scale market vendors, the majority of whom are females. The percentage of female buyers was slightly higher compared to male buyers of all types of processors. Respondents from the frozen and TVAP sectors reported that they did not extend credit to their buyers for tuna purchases, but cannery respondents indicated that they do allow purchases on credit. Across the three sectors, men and women responded similarly, although women in the canned and frozen sectors were slightly more likely to extend credit.

Canned and frozen processing companies reported that they sourced workers through personal choice or referrals, and TVAP primarily found its workers through personal choice. A high number of frozen, canned, and TVAP members reported having a family member that also worked in their company, either as paid laborers or supervisors. Other immediate family members worked as part of unpaid family labor and included the father, mother, niece and nephew.

TVAPs had a greater number of women in leadership positions (owners or supervisors) than canned or frozen operations. The female owners of TVAPs serve as president/vice president or department/division head of the business enterprise, while their husbands may either have a separate work/employment or assist their wives in the operation of the enterprise. Husbands who are working elsewhere may also provide seed capital/investment for the enterprise and just allow their wives to manage the business.

In regard to cooperatives and organization membership, in canned only one male and no female was a member of a cooperative. In frozen, among the females who were members of fishing related organizations, they were affiliated with fisherfolk associations and a women fisherfolk organization. The men on the other hand were members of the tuna industry association, processors industry association, and the employees' union. In TVAP, one of the females was President of the General Santos City Aqua Marine Processors Association, Inc. and three were members of other different associations. Membership in non-fishing related organizations was also very low, except for four frozen respondents and six TVAP females who were affiliated with *Gagmay Kristohanong Katilingban* (GKK).

Very few labor unions (e.g., Ten Point Manufacturing Corp Employees Union) exist in medium- and large-scale fish processing plants/ canneries, and the majority (67 of 75) of the males and females from all the types of processors said there was no labor union in their company. Six respondents (from frozen) indicated that they were part of a union. Understandably, there was no labor union in TVAP since these are usually family-owned and managed, home-based enterprises.

The fishers themselves have established few of the fishers' groups. An exception is the SOCSKSARGEN Federation of Fishing and Allied Industries, Inc. (SFFAII), which is an alliance of mostly medium- and large-scale fishing industries. This alliance is an umbrella organization of several tuna industry-related associations such as boat owners, tuna canneries, fish landing associations/cooperatives, purse seiners, and frozen seafood associations. Only one women's organizations was documented by the study, the *Saganang Buhay Nagkakaisang Kababaihan ng Minana*, which is composed of individuals engaged in fish processing. It receives technical support from BFAR. Similar to the other respondents, the presence of fishery-related activities in their communities is limited.

Key Findings

- Across the three types of processors, women are assigned to tasks, which required patience and attention to details while the men are given work requiring physical strength and speed.
- Purchasing behavior between men and women buyers differed but was not statistically significant—both are perceived to be strict with product quality, easy to negotiate with, knowledgeable about the product, compliant with agreed sales conditions (delivery schedule, packaging and labeling requirements and quality standards) and firm in their decisions.
- Canned and frozen processing facilities were reported as being more commonly registered with the Food and Drug administration than TVAPs.
- Very few groups exist that are organized by fisheries, with the exception of the SOCSKSARGEN Federation of Fishing and Allied Industries, Inc. (SFFAII); an alliance of mostly medium- and large-scale fishing industries.

Time and Space

Both men and women reported long hours at work at the processing plants. For working couples, housework is shared, but women spend more of their home time performing household tasks (Table 23).

Table 23. Twenty-four hour activity recall of males and females processors

24 Hour Activity Recall		
Time	Female	Male
4-5 AM	Wake children, prepare breakfast	Wake up
5-6 AM	Breakfast Prepare for work	Prepare food provision
6-7 AM		Breakfast Travel to processing plant
7-8 AM	Work	Change clothes/attire
8-9 AM		Work
9-10 AM		
10-11 AM		
11-12 AM	Prepare meals	Break time/lunch
12-1 PM	Break time/Lunch	
1-2 PM	Work, bring child to day care	Work
2-3 PM		
3-4 PM	Work	
4-5 PM		
5-6 PM		
6-7 PM	Prepare meals	
7-8 PM	Dinner	Go home
8-9 PM		Dinner
9-10 PM	Sleep	Sleep
10PM to 4AM		

On average, frozen and TVAP female workers spend an average of four and a half hours in reproductive work, slightly more than their male counterparts. Male frozen and TVAP workers spend more time on productive tasks, on average 10.9 hours. Canned workers exhibited a different trend, with males reporting more time spent in reproductive work than productive work, as compared to the time spent by the females. The results of the FGD corroborated the survey results (Annex 1-12).

Key Findings

- Both men and women spend long hours at work in the processing plants. Working couples share housework, but women spend more time on the weekends performing household tasks.
- On average, females working in TVAP and frozen processing plants spend more time on reproductive work than men, except for in canneries where men reported spending more time in reproductive work than females.
- Across all types of work and processors, there was no statistical difference in terms of time spent.
- Both men and women do not have time left to participate actively in community activities.

Legal Rights and Status

Both male and female employees in canned and frozen reported that their benefits included social security, Philhealth, maternity/paternity leave, 13th month pay, Pag-ibig, sick leave and accident insurance. However, on average, only about 93 percent of males and females enjoyed leave benefits. In canned, only 80% of both male and female respondents said they were being paid the minimum wage, while in frozen all claimed to be given the minimum wage. The women enjoy additional benefits accorded by law, Maternity Leave (60 days leave with pay), Solo Parent Act, Magna Carta of Women and Violence Against Women and Children (VAWC). Survey results did not reveal any information on the prevalence of worker contracts. Only about half of TVAP workers said they were provided with SSS; 77 percent of the females and 54 percent of the males were provided with Philhealth; leave benefits were availed by very respondents; accident insurance was availed by four females and only one male; and minimum wage was paid to only about 36 percent of workers.

All respondents from canned and frozen processors said their companies provided them with protective clothing to do their work and a majority of these respondents (80%) also used hand gloves in handling tuna and were provided with protective eyewear. A few of these respondents also claimed that there were some employees who were younger than 18 years old at their companies, but none were directly observed or interviewed under this study. In TVAP, fewer workers reported that they were provided with protective clothing or eyewear.

As to the working environment, 92 percent of males agreed that the working area was well ventilated and well-lit but only 85 percent of the females said the same. Nursing facilities were very inadequate and sometimes unavailable, and toilet facilities were adequate according to 82 percent of the females and to 61 percent of the

males. Adequacy was based on the perception of male and female users in terms of quantity and accessibility, but did not survey for the availability of other accessories such as soap and tissue.

Key Findings

- Overall, both men and women in the canneries and the frozen sector received the same salary, benefits from the company, and protective clothing, eyewear and gloves to do their work, but not in TVAP, where not all workers enjoy the minimum wage and benefits.
- In the canned and frozen sectors, there was a higher percentage of regular female workers throughout the year, in both peak or off seasons, while TVAP employs more males.
- Both canned and frozen male and female respondents described their working areas as well ventilated, well lit, ans with adequate toilet facilities, but TVAP workers could not claim the same.

Power and Decision Making

Men usually work full time, and if their wives want to seek employment, men usually decide on the matter. Women do the household budgeting and decide on recreation and leisure activities for the family. They usually attend PTA meetings, and in terms of community activities, women make their own decisions about joining church activities, volunteering as Barangay Health Workers (BHW) or Barangay Nutrition Scholars (BNS) or helping in the coastal clean-up or "*linis dagatl."* Both women and men usually decide on children's education, discipline and health concerns. These trends were consistent among all three types of processors, although in TVAP women commonly had greater decision-making power.

For decision making in the work place, in canned operations, it is the owner who decides who will supply fresh tuna and non-fish raw materials, finance the processing and who will buy the processed tuna. The female manager or supervisor decides other major decisions, such as the production schedule, volume of production, hiring of workers, pricing of products and training. A few respondents reported that in their companies, male and female managers shared decisions. In frozen, companies are typically male-owned and thus males make the decisions to determine financing for the operation, the buyer of processed tuna and the pricing of products. The male manager primarily determines the supplier of fresh tuna and the hiring and training of workers, while female managers manage the volume and schedule of production and the supplier of non-fish raw materials. In TVAP, owners are generally female and manage all areas of decision-making, sometimes shared with their spouse.

Key Findings

- Women, in all types of processors, usually decide on domestic and community activities. Both men and women decide on matters related to children, school, work, family planning, health and membership in organizations.
- Women in TVAP generally decide on matters related to family and business due to their higher level of education and position in the business enterprise.

4.2.3 Traders

The General Santos Fish Port Complex had a total of 1,211 personnel as of February 2017, which were 76.8 percent male and 23.2 percent female (Annex 1-14). A majority of the workforce are laborers (43% males and 5% females), followed by the market traders that include brokers, *jamboleros*, financers, suppliers, and dispatchers (24% males and 11% females).

Traders buy fresh and processed tuna from fishers and processors and sell the product to end-consumers, restaurants, retailers, supermarkets, market vendors, processors, wholesalers, and exporters. At the General Santos Fish Port complex, there are actors who are not directly part of the tuna value chain but their services support trading activities. These include the checkers, *jamboleros*, and tray holders.

The General Santos Fish Port Complex (GSFPC) has three market areas (Figure 18). Market One is a male-dominated area where most of the laborers and intermediaries (traders, brokers, financiers, *jamboleros,* suppliers, dispatchers, scalers, recorders, etc.) do business and where the big tuna fish are traded in bulk or in kilos.

Market Two is a more gender equal area where the office of most of the fishport employees is located, where brokers and traders are usually couples (husbands and wives), and smaller tuna and tuna-like species are traded.

Market Three is where the office of the SOCCSKSARGEN Federation of Fishing and Allied Industries, Inc. and offices of other fisheries associations are located. It also is an area where tuna is prepared for hauling in big trucks for different destination areas. Aside from fish storage areas and containers, offices and canneries, the fishport provides facilities such as restaurants, convenience stores, banks, an ice plant, cooperatives, clinic, and toilets.

Figure 18. Map of the General Santos Fish Port Complex

Legend: Female ♀ Male ♂
Note: the bigger symbol denotes the dominant sex

Socio-demographic Profile of Traders

There were 45 trader-respondents, 51 percent of which were females and the remaining 49 percent were males (Annex 1-13).

Age and Civil Status

The mean age of respondents was 38 years old for female traders and 40 years old for the males. For both sexes, traders were as young as 19 years old and as old as 60 and 65 years old for males and females, respectively. The majority of the female (74%) and male (64%) traders were married, and around 4% reported being in a live-in situation (where partners share budgeting and home tasks without the benefit or any legal or church rites).

Educational Attainment

Female traders were relatively more educated than the male traders, with at least one female trader having a college degree and the other eight having some college education. Some of their spouses (17%) had some college education, but the greater percentage (44%) were high school graduates. Most of the male traders had either finished high school or had some high school education.

Residence and Ethnicity

More than 65 percent of male and female traders belonged to Cebuano-Bisaya ethnic group and had been living in General Santos for about 25 years. Roughly, 75 percent of traders' spouses also came from Cebuano-Bisaya lineage. The other trader-respondents belonged to Ilonggo, Ilocano, Maguindanaoan, and Tausog descent.

Income Sources and Levels

Both male and female traders operated outside of GSFPC and were classified as small-scale operators. Almost all of the male and female traders were doing business within the barangay or in the same area where they lived, except for one female-trader and one male-trader whose trading operations extended to other areas of the region. Only three of the 45 trader-respondents processed fresh tuna into value added forms like dried, chilled/frozen tuna, cubes, *"embutido"*, and *"chorizo"* before selling the product. The greater majority (93%) were engaged in the buying and selling of fresh tuna.

Fish trading was the primary source of income for both male and female traders, accounting for about 93 percent of their total household income. Men earned on the average P9,375.00 per month from fish trading, while women earned about P7,955.00 per month. They contended, however, that given the average household size of about four to five members, the monthly income was not sufficient to allow them to live comfortably. Based on FGDs with traders, the number of women entering the local fish market has been on the rise over the last years due to the lack of alternative economic activities for them, and due to the need to contribute to household income. Their high dependency on fish trading makes them vulnerable to fluctuations in fish landings/supply of fish traded, which is further aggravated by limited alternative secondary income sources.

Around 18 percent of respondents earned between P15,000 to P10,001 a month, with as many female traders as the males; 42 percent earned between P10,000 to P5,001 a month; and 20 percent earned between P5,000 and P2,000 a month (most of whom were females), (Annex 1-15). Only two percent earned more than P100,000 a month, as reported by a male trader. The highest female reported earnings of P50,000 maximum per month.

Key Findings

- Trader-respondents are small-scale operators who rely primarily on fish trading, specifically the buying and selling of fresh tuna. They are mostly middle-aged, married, with high school education, and of Cebuano-Bisaya lineage.
- Checkers, *Jamboleros*, and tray holders are not directly involved in the buying and selling of the tuna value chain but they render services in support of the trading activity.
- There are an increasing number of female checkers/recorders but male checkers/recorders were still preferred because they are thought to move and work faster compared to the women, and men can perform physically demanding tasks in addition to recording.

Six Domains of Gender Analysis

Access to Assets

Access to good storage is necessary not only to preserve the quality of the fish, but also to enable traders to postpone sales until prices are higher or when buyers offer better prices and terms. About 49% of the 45 trader-respondents indicated that they do not have access to storage facilities and must immediately sell the tuna products at prices dictated by their buyers. Of the remaining half who reported having storage facilities, some claimed that they owned the storage facilities while others made use of them on rental basis. Female traders noted that while they had access to storage facilities, their husbands had the final say on the matters pertaining to use, maintenance, and operations of the storage facilities.

Both male and female traders rely on self-financing and loans from formal financing institutions to raise capital in putting up the trading business and for their working capital requirements. Respondents indicated that it is difficult to access formal capital because of numerous documentation and collateral requirements. In addition to sourcing funds from formal sources, they also rely on informal sources like their immediate family members, relatives and friends. However, when the need for working capital is urgent and when friends and relatives are not able to lend them any cash, traders reported resorting to "five-six" financing[1]. Even with exorbitant interest rates under the "five-six" financing scheme, borrowing from these moneylenders is tempting because of its favorable terms with no documentation requirements nor formal agreements. Female traders are perceived to be braver, bolder, and take greater risk compared to their male counterparts in accessing capital from informal sources, especially from "five-six" money lenders. All of the trader-respondents contended that their buyers did not provide them with any form of financing and that they did not have access to financing assistance/support from the government.

Respondents reported easy access to laborers/workers and said that they can easily find laborers/workers within a day whenever they had a need for them in the trading operations. About sixty percent of respondents reported that family members took part in the trading operations, inclduing their spouses, sons, and daughters. The majority of the spouses and all other family members who were involved in the business worked as part of the labor force, except for four spouses who had supervisory positions. Thirteen trader-respondents claimed that spouses who participated in the trading business were paid for their labor while 11 maintained otherwise. Moreover, there were instances where minors (aged 12 to 18 years old) were asked to work with the trading enterprises without pay, as part of family labor (Annex 1-16).

Hired labor is common among the traders of fresh and processed tuna. Both male and female trader-respondents maintained that they prefer to hire labor on a contractual basis as opposed to hiring workers for permanent positions in the enterprise. During peak season, female traders hired 73% contractual workers and male traders hired 86% contractual workers, with proportionally more female hires than males. The pattern is also true during off-season where 80% and 86% female and male traders, respectively, hired contractual workers. Respondents indicated that they hire less than a quarter of the personnel on permanent status, of which there are more males than females. (Annex 1- 7). Conversely, there are more female contractual workers than their male counterparts.

Price, technology and market information are important resources in trading of fresh and processed tuna products. Respondents tried to gain information related to new technology, market trends and pricing from multiple sources. The male traders, for example, accessed information about new trading practices and methods from other traders, TV programs, and their friends. Women-traders also accessed information from the same sources, but also tapped other information sources such as government agencies, internet, local government units, local trade fairs/food shows. Overall, women had more diverse sources of price, technology and market information than men.

Both male and female trader-respondents indicated that their primary market consisted of households. The male traders, however, also mentioned accessing more varied markets such as local restaurants, institutional buyers, retailers/supermarkets, processors, and small-scale vendors (Annex 1-18). The female traders claimed that family and household responsibilities prevent them from accessing larger and profitable markets, which are located farther from where they reside. Men traders have greater mobility because they are not tied down with household responsibilities and have more freedom to travel on their own.

The female traders sourced their supply of fresh tuna from other traders of fresh tuna or direct from small-scale municipal fishers and from small, medium and large-scale commercial fishing operators. Their male counterparts also sourced their fresh tuna supply from the municipal and commercial fishing operators.

[1] *The term "five-six" comes from high interest, which is around 20 percent per day. Say, for every P5.00 borrowed in the morning, the borrower pays P6.00 to the 5-6 lender when he collects payment in the afternoon.*

Generally, the suppliers of tuna preferred on the spot cash payment from the traders but there were exceptions in cases where the traders had been their "suki" or regular buyers for several years. According to female traders, 58 percent of their suppliers were men and 42 percent were women. The male traders also indicated that majority of their suppliers were men (Annex 1-19).

Key Findings

- Female traders have a higher educational level but regardless of education, they have less access to profitable markets. Female traders sell primarily to consumers within the same barangays where they reside, as they are closer to home; but male traders have greater mobility, and therefore, greater access to larger markets. This has resulted to income differentials between male from female traders.
- The majority of traders' spouses and other family members participate in the trading business as part of the labor force and but are not compensated for their labor.
- Female traders are thought to be braver, bolder, and take larger risks, compared to their male counterparts, in accessing capital from informal sources, especially from "five-six" money lenders. Female traders also have more diverse sources of price, technology and market information than men.

Knowledge, Beliefs and Perception

Research did not reveal and significant gender differentials with regard to critical knowledge gaps about tuna and fishery regulations, but awareness was found to be low across the board (Annex 1-20). More than half of male (64%) and female (61%) traders did not know the correct legal size for purse seine-caught tuna, identifying the size as three centimeters, instead of the correct size of three and a half centimeters. Moreover, the majority of the trader-respondents wrongly believed that the city government required the registration of purse seine fishing. Two other statements with the most incorrect answers were that a Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area; and that smoked tuna is carcinogenic.

Overall, the average percentages of female and male traders who answered the statements correctly were 47.91 percent and 49.27 percent, respectively. These percentages were considered rather low and highlighted a critical knowledge gap that need to be addressed. There should be increased dissemination of information about tuna and fishery regulations at appropriate touch points to ensure that the right information reaches the right audience at the right time. Increasing the level of knowledge among the traders is very critical for the following reasons: to promote traders' personal safety and interests, to ensure the sustainability of their trading operations, and promote sustainable fisheries management with the end objective of strengthening the competitiveness of the tuna value chain.

Research also concluded that continued positive beliefs about women traders could pave the way for increased entry of women in the trading business and better appreciation of women's role in tuna value chain. Both male and female traders believed that "women are more skillful in trading than men," that "women are easier to deal with than men in trading business," and that "women are more efficient in trading than men." Moreover, they both believed that "men and women are paid equally for the same kind of work." However, while positive beliefs were reported and although approximately 41 percent of male traders viewed women as more skilled and efficient, they still maintained that men make better judgement when it comes to the fish quality issues (Annex 1-21). While women are well-regarded in the trading, male decision-making paradigms were observed to persist.

Beliefs about male and female performance strengths and weaknesses also determine what work they receive. Most buyers and brokers reportedly prefer male checkers not only because they move and work faster compared to women, but also because they can perform physically demanding tasks in addition to recording. There were those, however, who preferred women because they considered them to be more meticulous and trustworthy. The salaries/allowances were not same for men and women checkers because of the additional tasks performed by men like loading and unloading of catch. An in-depth interview with a female checker who had been working at GSFPC since she was 18 years revealed the existence of sexual harassment incidents in the workplace and had personally experienced sexual harassment about six times. She contended that other female checkers had also experienced similar sexual harassments in the workplace. In the absence of clear policies and processes to handle complaints, she reported that females often resolve the harassment themselves by publicly shaming, humiliating or physically reprimanding the offender. These tactics were reported to be effective but do not help to more largely document or regulate the offenses.

In regard to the *jamboleros,* if given a choice, the male *jamboleros* preferred to cooperate with other male *jamboleros* instead of partnering with female *jamboleros* because they viewed their female counterparts as slow, especially in submitting price quotations, and difficult to deal with. Men, on the other hand, were perceived to be fast and straightforward when pricing decisions had to be made. The *jamboleros* reported that pricing decisions are usually based on the highest bid, except in some instances when the buyers adopted the same pricing scheme. While still in the minority, the women *jamboleros* had survived in a male dominated sector because of their good performance.

Key Findings

- Both male and female traders have limited knowledge about tuna and fishery regulations. Increasing the level of knowledge among the traders is necessary to ensure the sustainability of their trading operations and promote the sustainable fisheries management with the end objective of strengthening the competitiveness of the tuna value chain.
- Positive beliefs about women traders could pave the way for more entry of women in the trading business and better appreciation of the women's role in tuna value chain.
- There are an increasing number of female checkers/recorders, but male checkers/recorders are still preferred because they are thought to move, and work faster compared to the women, and can perform physically demanding tasks in addition to recording.
- Female checkers and *jamboleros* are perceived by others to be meticulous and trustworthy in their work, which are practically extensions of homework (i.e. washing, cleaning and piling).
- The absence of gender-friendly facilities as well as policies, rules and procedures against sexual harassment in the workplace pose as added burden to women as they perform productive work.

Practices and Participation

Both male and female trader-respondents agreed that men commonly perform the more physically demanding work such as loading and unloading of products, removing guts and gills of tuna, and cleaning and maintenance of the physical facilities. They also agreed that aside from physical work, male traders were responsible for marketing activities like identifying suppliers and buyers of fresh tuna. Moreover, both male and female traders viewed administrative and clerical jobs as part of women's' work. As such, administrative works like receiving payment from buyers, recording of production, stocks/inventory, sales and financial transactions, processing of registration and legal documents as well as payment of salaries and bills were done mostly by female traders (Table 24 and Annex 1-23).

Table 24. Major Activities Performed by Male and Female Traders

Major activities performed according to female-trader respondents		Major activities performed according to male-trader respondents	
Male	Female	Male	Female
1. Load & unload products 2. Identify suppliers of processed tuna 3. Look for supplier of tuna 4. Transport tuna to buyer 5. Identify suppliers of fresh tuna 6. Remove guts and gills 7. Storage 8. Clean & maintain physical facilities	1. Receive payment 2. Payment of salaries and bills 3. Weigh, sort, & classify 4. Process registration and legal documents 5. Negotiate with buyer 6. Record sales 7. Record financial transactions 8. Quality control 9. Clean & maintain physical facilities	1. Load & unload products 2. Look for suppliers of tuna 3. Clean & maintain physical facilities 4. Remove guts & gills 5. Weigh, sort & classify 6. Identify suppliers of fresh tuna 7. Identify buyers of fresh tuna 8. Negotiate with buyers	1. Receive payment 2. Process registration & legal documents 3. Record sales 4. Record financial transactions 5. Record production 6. Inventory of stocks 7. Payment of salaries & bills 8. Identify buyers if processed tuna

The majority of respondents had limited awareness and participation in fishery-related projects/activities. Of those who were aware, most of the male traders admitted that they had never participated in any community or associational meetings, nor took part of the *"Bantay Dagat*", nor any coastal resource management programs. Their female counterparts likewise admitted that they had not taken an active role in *"Bantay Dagat"* nor participated in any coastal conservation activities. Both male and female traders likewise admitted that their participation in skills training programs was not very frequent. However, they were always present whenever there were social activities in their community.

Participation in fishing-related organizations was also found to be very limited. A high percentage of male (82%) and female (78%) traders were not part of any fishing-related organization. Four male traders (18%), however, claimed to have membership with the tuna industry association and a cooperative. Five female traders (22%) maintained that they participated in fishing-related organizations, two of them occupied leadership positions (i.e., head of a cooperative, a secretary, and/or treasurer of the fisher folks' associations), and the remaining three female traders had membership positions.

Key Findings

- Stereotypes about work still prevail. Most of the physically demanding jobs are performed by male traders. Women's responsibilities revolved around administrative works like recording sales and financial transactions, processing registration and legal documents; and paying salaries and bills.
- The limited awareness and low-level participation by both male and female traders in fishery-related programs/activities and fishing-related organizations limit the opportunity to contribute to tuna value chain upgrading.

Time and Space

Table 25 summarizes the variability between gender in the availability and allocation of time and locations in which time was spent in a typical day. Male and female traders spent far more than 8 hours per day performing productive work. Male traders spent, on average, nearly 12 hours per day while female traders spent over 12 hours per day. Of the total hours spent on production, men and women traders spent on the average 9 hours per day on fish trading, with the remaining hours spent on other productive activities to augment family income. Thirty five percent of the female traders raised pigs, attended to their "*sari-sari*" stores and internet cafés, and/or sold grilled fish and "*litson."* Fourteen percent of the male traders engaged in furniture making and helped their wives in attending to their "*sari-sari*" stores.

Female and male traders spent, on average, nearly four hours a day on reproductive work. Both helped each other in doing household chores, cooking food, rearing children, and bringing the children to school. There were household chores, however, that only the women performed such as washing the clothes and dishes, preparing the children for school and helping them with school assignments.

Table 25. Number of Hours per Day Spent by Traders on Various Activities

Number of Hours Per Day										
Statistics	Productive		Reproductive		Sleep/Rest		Community		Leisure	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Mean	11.9	12.7	3.8	3.7	7.5	7.2	0	0	0.8	0.4
Std. Dev.	2.3	2.2	1.7	1.6	1.9	1.5	0	0	1.3	0.6
Minimum	6	8	2	1	4	4	0	0	0	0
Maximum	16	16	10	7	12	9	0	0	5	2

Philippine culture expects that women take care of children and household chores, but it would seem that women traders do not allow this cultural expectation to limit the time and labor they commit to their businesses. The average time female traders spend on productive work is relatively higher than those of their male counterparts. However, the large amount of time that female traders spend on their productive and reproductive activities does negatively impact other areas of their lives, resulting in less time for leisure and sleep/rest. The female traders slept/rested on the average 7.2 hours and spent 0.4 hours for leisure while the male traders had longer time for sleep/rest (average= 7.5 hours) and leisure (average = 0.8 hours). A typical day of a trader is shown below (Table 26.)

Table 26. Twenty-four (24) Hour Activity Recall of Male and Female Vendors

24 Hour Activity Recall		
Time	**Female**	**Male**
4-5 AM	Cook, clean house, do laundry, prepare breakfast, wash dishes, prepare children for school	Wake up, drink coffee, prepare for work, help cook food
5-6 AM	Eat breakfast, prepare for work. Go to fish port	Eat breakfast, prepare stall for trading, buy fish, go to fishport
6-7 AM	Trading	Trading
7-8 AM		
8-9 AM		
9-10 AM		
10-11 AM		
11-12 AM		
12-1 PM	Lunch, Rest/Nap/ others continue trading while having lunch	Lunch, Rest/Nap/ others continue trading while having lunch
1-2 PM	Trading	Trading
2-3 PM		
3-4 PM		
4-5 PM		
5-6 PM		
6-7 PM	Go Home, prepare dinner / some still do trading / others still do other productive work	Trading at the same time have dinner
7-8 PM	Dinner, house chores / others still attend to their stores	Close stall, go home, have dinner
8-9 PM	Help children with school homework and other household chores / others go home from work	Watch TV, Rest, Facebook
9-10 PM	Rest, watch TV/ other still do household chores and attend to needs of children	Leisure/ Watch TV, have drink with friends, rest,
10-11 PM	Watch TV / others Sleep	Watch TV / others Sleep
11PM – 4AM	Sleep	Sleep

The overwhelming majority of male and female traders were not aware of any fisheries related projects/activities in their community; and of the few who were aware, they claimed that they had never participated in any of the projects. The only time they involved themselves with the community was during social events. Productive responsibilities had already captured most of their waking time so there was not enough time to spare for active involvement in community programs, especially for female traders who had to deal with responsibilities at the home in addition.

Key Findings

- Simultaneous and competing demands for productive (market) and reproductive (household) labor time have negatively impacted on women's leisure and sleep/rest. On average, women perform a greater number of productive and reproductive work hours than their male counterparts.
- Family-work responsibilities and tasks reduce women's availability for participation in community life.

Legal Rights and Status

The majority of traders contended that they were not covered by SSS and accident insurance; nor were they entitled to any forms of leave benefits. The women traders, in particular, indicated that there were no appropriate facilities where mothers may leave their small children, change their clothing, or feed them. In addition, interviews found that the trading companies did not have any programs to address sexual harassment issues, nor any policies, rules, or procedures that guided workers in the case of unwanted sexual harassment incidents.

Payment terms are largely unstandardized. According to a checker who was employed by a fish broker, there are no standard salary scales for checkers, but there are two salary schemes: a fixed amount paid on monthly basis, or a variable amount paid on daily basis. Based on her experience, she received about P10,000.00 per month, excluding tips given by officers/crew of the fishing vessel. Other brokers prefer to pay the checkers on a daily basis at varying amounts depending on the volume and price of the catch. If the revenue was substantial, brokers paid checkers about P1,000.00 per day but if the income was small, then checkers were given P150.00 for transportation expenses. *Jamboleros* are either paid commission on gross sales (5 to 7%) as a representative of the fishing company/producer or receive a straight commission per truck. They have the freedom to negotiate with buyers but typically give preference to their *"suki"* (regular buyers) to avoid the risk of not being paid for the delivered goods. For tray holders, the majority who are males, earn approximately P273.00 per day and are not entitled to overtime pay. Tray holders are responsible for lost trays and are required to pay P300.00 per lost tray.

Key Findings

- There is an uncertain future for both male and female traders (including checkers, *jamboleros* and tray holders) given the absence of social security and accident insurance.
- Inequitable compensation, absence of gender-friendly facilities, and family-work-life imbalance adversely affect the quality of life of workers.

Power and Decision Making

Fifteen of the 23 female traders engaged were owners of trading enterprises, two were non-owners but were hired as part of the management team, and the remaining six were hired as workers. The owners occupied top management positions or became officers of the organization. In the case of the male traders, 12 of 22 owned trading outfits and the rest were hired as workers. Just like their female counterparts, the male owner-traders occupied management positions. The female traders who owned the trading entities claimed that they were

the primary decision makers for their businesses, responsible for deciding at what price to sell, where to source the fresh and processed tuna, to whom to sell, where to get financing, and other issues concerning the business. However, they claimed that they sometimes consulted their spouses out of respect to the position of man as the head of the household, as prescribed by Filipino customs. The male trader-owners on the other hand, maintained that they were not obliged to consult their spouses on matters pertaining to the operations of the trading businesses but found no harm in informing them of the status of the operations, considering that the earnings from the businesses were usually turned over to the wives who were responsible for managing the household budget.

As far as household decision issues were concerned, both male and female traders agreed that the woman of the house made decisions with regard to food purchase and preparation, budgeting of household income, leisure activities and health matters. Discipline in the family, however, was jointly imposed by both father and mother. Decisions pertaining to education and community involvement, were sometimes made by the mother, and sometimes by the father.

Key Findings

- Male traders decide on work matters but usually turn over earnings from business to wives who manage household budget.
- Female traders who own the trading outfits decide on matters pertaining to trading operations but consult their spouse out of respect to the position of man as head of the household.
- Wives/mothers make decisions regarding food purchase and preparation, budgeting of household income, leisure activities and health matters. Discipline in the family is jointly imposed by both the father and mother.

4.3 Opportunities, Constraints and Gender Needs along the Value Chain

4.3.1 Opportunities and Constraints: Municipal Fishers

Opportunities of a large local market keeps municipal fishers focused on their livelihood. Moreover, for those who are fully financed from personal savings, the promise of a 100% profit is enticing. For others, the presence of informal financiers lessens the fishers' problem of sourcing the small capitalization needed for fishing.

The Bureau of Fisheries and Aquatic Resources (BFAR) provides fishing materials/equipment to fishers, just as it also provides capacity building activities such as trainings in processing fishery products and value addition. Opportunities seem to be open to both men and women, except for the BFAR-assisted boat, gears, and accessories, which only men can avail of. In terms of training and capability building activities, financing, and trading options, both men and women have access to the programs (Figure 19).

Specific constraints for women include the absence of a women's group that will represent the interests of the women workers and entrepreneurs in small-scale tuna fisheries. Women likewise believe that there are constraints that they face, but which men also face. In the VC node for input provision, these include the lack of social benefits, risks of non-payment to coops, 100% loss incurred by self-financed fishers to damages caused by disasters, and the non-registration of boats with the LGU.

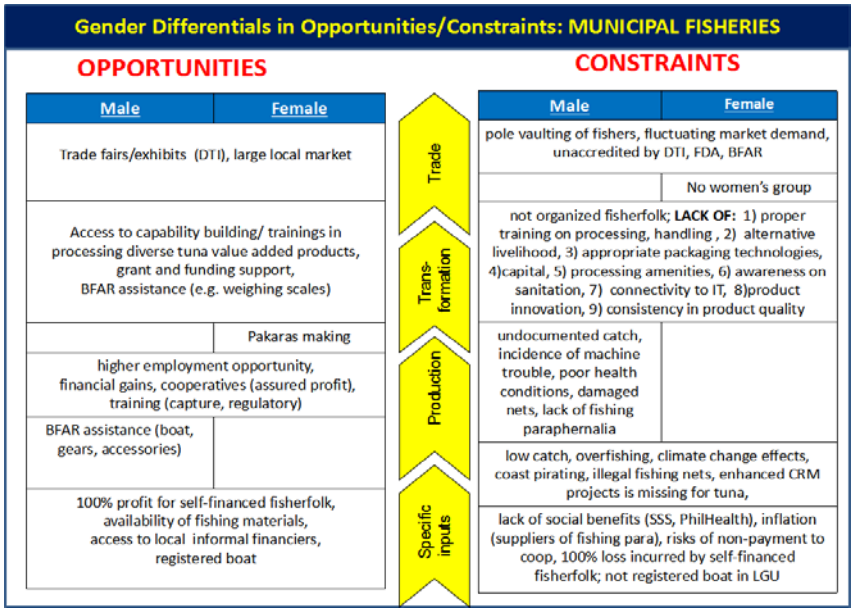
In the production VC node, both men and women are negatively affected by low catch, overfishing, climate change, coast pirating, illegal fishing nets, and missing CRM projects specific for tuna. Men felt they were constrained by the incidence of machine trouble, poor health conditions, damaged nets, lack of fishing

paraphernalia. For the fishers themselves who are involved in production, they recognize undocumented catch as a concern in the industry.

In the processing VC node, common constraints for men and women were identified as unorganized fishers, and a lack of an enabling environment (e.g. lack of proper training on processing and proper handling, lack of alternative livelihood, lack of appropriate packaging technology, lack of capitalization, lack of processing amenities, lack of awareness on sanitation, lack of connectivity to information technology, lack of fishing innovations, and lack of consistency in processed products produced for sale).

Finally, for the trading VC node, a fluctuating market demand is a main concern, together with the non-accreditation with DTI, BFAR and the Food and Drug Administration (FDA).

Figure 19. Opportunities and Constraints in Municipal Fisheries



4.3.2 Opportunities and Constraints: Handline Fishers

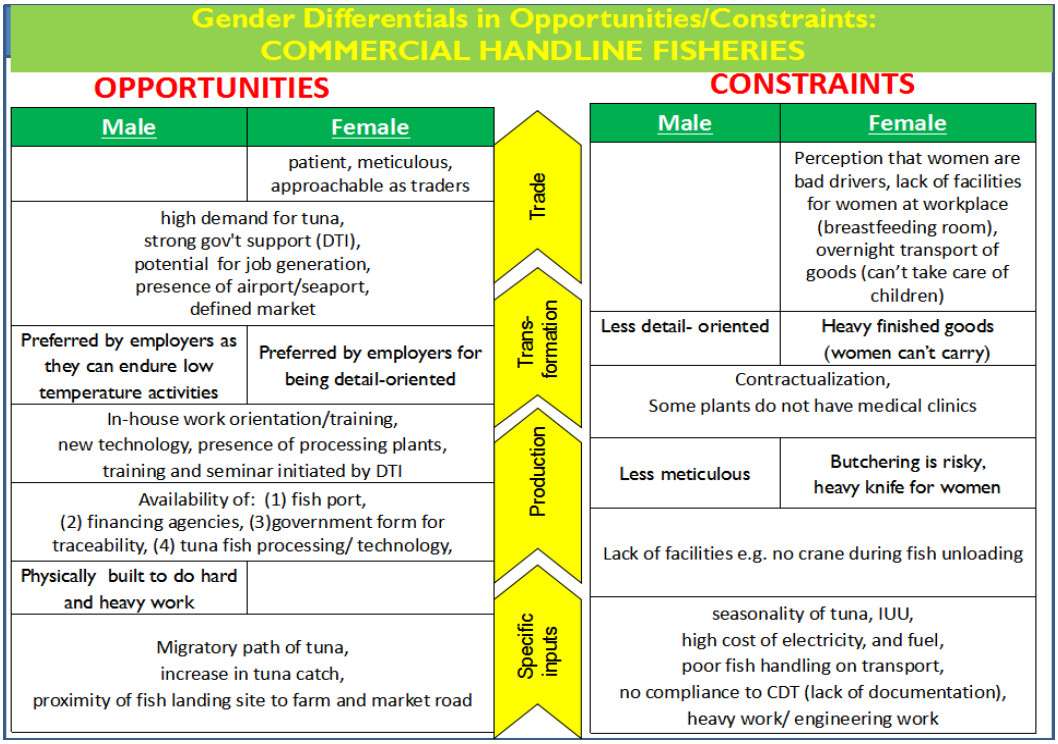
For commercial handline tuna fishers, the market is well-defined, there is a high demand for tuna products, and both men and women recognize the industry's potential for growth and for employment generation. Employers generally prefer to employ men because of their physical strength and endurance (particularly to low temperatures in cold storage), thus providing men with opportunities to jobs in production and processing (Figure 20). Meanwhile, women are hired in processing and trading/marketing for their tendencies toward being detail-oriented, patient, meticulous and approachable.

For the other VC nodes, the opportunities faced by both men and women seem to be consistent. Opportunities include the proximity of the fish-landing site to the farm and market road, presence of financing agencies, presence of government form for traceability, presence of technologies and capacity building programs. Processing plants are available, and these provide job opportunities.

Women are constrained by their physical make up or perceived strengths and weaknesses. Butchering is risky for women and heavy finished goods are heavy for women to carry. Moreover, there is a lack of breastfeeding and day care nooks for women in the workplace. Women are not hired for overnight work because they are expected to take care of the children, nor are they hired as drivers because women are perceived to be bad drivers. Men are less meticulous and have less orientation on the details, hence, they are less preferred for filleting, slicing and cutting. They are fast workers (volume-wise), but their slices/fillets are not fine nor uniform in thickness.

The other constraints identified along the value chain are similar for both men and women, and include IUU fishing practices, seasonality of tuna, high cost of electricity/fuel, poor fish handling, no compliance to CDT (VC node on input provision); absence of cranes or similar equipment for fish unloading (VC Node on production); contractualization, and the absence of medical clinics in some plants (VC node on processing); among others.

Figure 20. Opportunities and Constraints in Commercial Handline Fisheries



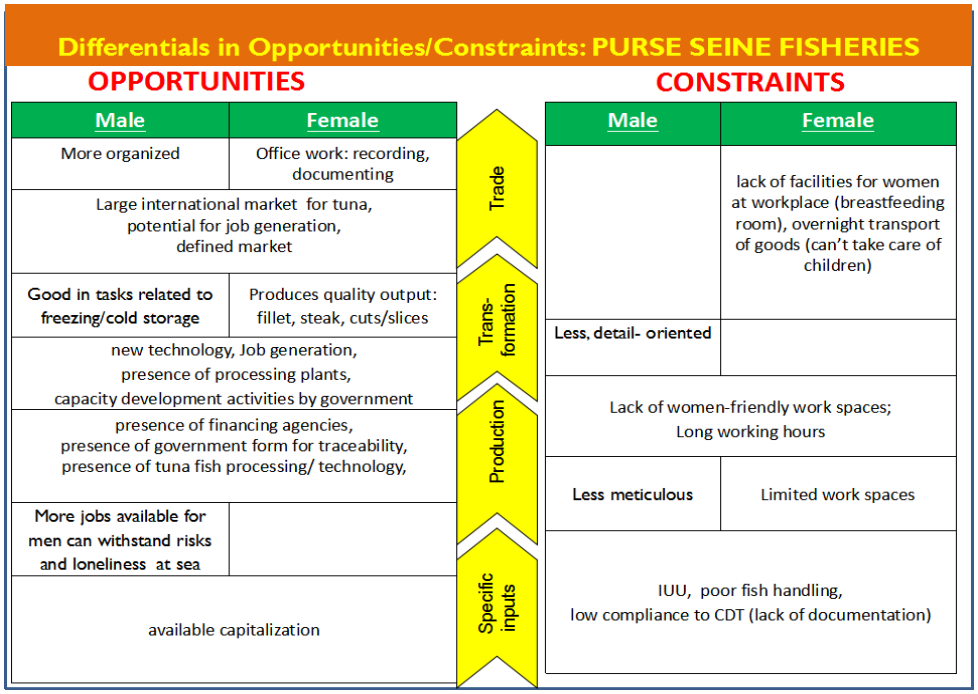
4.3.3 Opportunities and Constraints: Purse Seine Fishers

The canneries and the assembly lines provide workspaces for women, who are preferred over men because of the quality outputs of tuna slices/fillet/steaks that they produce. Women are also hired by employers for office work because they are good record keepers, and marketing agents—tasks which are generally extensions of homework. On the other hand, men are hired for their physical strength that loading/unloading, and cold storage require (Figure 21).

Other opportunities are derived from the large potential for employment that results from the large and well-defined market for tuna. Processing plants, boat owners, and large exporters are available in the industry, and provide regular incomes for men and women.

Constraints and concerns in the industry seem to affect women more than men. Women's participation in the industry is limited by physical characteristics and perceptions that the industry requires a man's physical strength. In the production VC node, there is the lack of women-friendly equipment and work areas that could enable women to expand their work spaces during catch landing, and in transferring goods from one area to another. In addition, in some processing plants there are no medical clinics that can address immediate health needs of employees, which affects both men and women. There is also a lack of breastfeeding rooms for working mothers.

Figure 21. Opportunities and Constraints in Purse Seine Fisheries



Key Findings

- Municipal fishers are generally unorganized, and there are no women's groups to advocate for the rights of the many women employed.
- In commercial handline fisheries, there are no women crewmembers. Women's roles are limited by beliefs, perceptions and practices that have long enveloped a traditionally-male dominated fishing sector.
- In purse seine fisheries, women's workspaces are limited to extensions of homework such as cutting and cleaning (kitchen work), purchasing and disbursements, and marketing.
- In some cases, there is an increase in women's access to resources and industry opportunities, but men still possess control and decision making.

4.3.4 Practical and Strategic Gender Needs

Gender issues arise when certain gender needs remain unaddressed and the welfare of one sex is compromised and/or jeopardized. USAID Oceans' research sought to assess the practical and strategic gender needs in the tuna fisheries sector. Meeting the practical gender needs (PGNs) can improve the quality of life for women but may not necessarily alter the traditional roles at home and at work, resulting in the persistence of multiple burdens and lacking recognition. Examples include the need for more sources of income, health care and protection/security, and working conditions. These inadequacies in the system can easily be addressed in the short run. That is, the provision of alternative livelihoods, and additional capitalization for higher incomes; the provision of health benefits and insurance for health needs; and the provision of breastfeeding nooks as an example of better working conditions for the women.

Strategic gender needs (SGNs), on the other hand, require a long-term solution, and alter the woman's position in society and the tuna value chain. SGNs enable a woman to challenge her subordinate status or unequal

position at home or at work in the relevant VC nodes. Examples are as follows; the woman is always hired as an assistant to man's work even if she is capable of the task, unpaid woman's productive work, or the woman is not allowed to own properties. These are needs, which if met, will establish the woman as a partner to development, not as a beneficiary or client to programs. This means institutional and systemic changes that will make women's voices heard, her decisions consulted, and her relationship with the opposite sex is respected as an equal.

Below is a summary matrix of men's and women's PGNs and SGNs that USAID Oceans' research identified in the tuna value chain (Table 27).

Table 27. Practical Gender Needs and Strategic Gender Needs along the Tuna Value Chain

Gender Needs	Municipal Fisher		Handline Fisher		Purse Seine		TVAP Processors		Commer-cial Processors		Traders	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
PRACTICAL GENDER NEEDS												
No hazard pay for risky jobs			x	x	x	x			x	x		
Absence of social security: SSS and PhilHealth	x	x					x	x			x	x
Long hours of standing in processing centers/assembly lines										x		
Finished goods are heavy to carry		x						x				x
Work schedule (transporting of goods) takes place at night		x		x		x						x
Lack of protective clothing for cold storage work									x			
Absence of nursing area in the work place								x		x		x
Absence of clinics/infirmary at work place								x		x		x
Poor ventilation in canneries									x	x		
Heavy knives used in butchering		x						x		x		
Lack of alternative livelihood		x		x		x		x		x		x
Poor access to IT	x	x	x		x						x	x
STRATEGIC GENDER NEEDS												
Lack of women-friendly machineries/ equipment that may allow women to do fish hauling		x					x					x
Less access to skills enhancement for women to be able to drive forklifts, cranes, and heavy equipment		x								x		x
Absence of women-friendly boat facilities so they can also fish		x		x		x						
Lack of women-specific programs/projects		x		x		x		x		x		x
Perception that women are bad drivers		x						x		x		x
Lack of awareness on the potential roles of women in tuna resource conservation, policy formulation, and implementation	x	x	x	x	x	x	x	x	x	x	x	x
Poor women participation in activities related to anti- IUU fishing		x		x		x						
Absence of women's organizations		x								x		x
Lack of women's participation in policy making		x		x		x		x		x		x
Lack of women's representation in bodies that are in charge of program		x		x		x		x		x		x

design, implementation and monitoring (project cycle)												
Lack of capacity building initiatives for women		x		x		x		x		x		x

4.4 Enabling Environment

Though men and women are beset with major industry participation constraints, increasing their income and quality of life has the potential to create an environment characterized by gender equality and economic empowerment. Fisheries agencies and organizations can provide the physical and structural environment that fosters enhancements to the working and living conditions fishers, processors, and traders; as well as their sense of justice and empowerment (Annex 1-24 and Annex 5). Value chain enablers (i.e. government agencies, private/business sector, development agencies, local/national government units, other partners and non-government/people's organizations) can play a role in financing and livelihood assistance, capability-building and training, infrastructure and other facilities, marketing assistance, participation in CDT and other community activities, compliance with legal matters and policies, information dissemination, and technical assistance/technology transfer.

Financing and Livelihood Assistance

BFAR and local government units (LGUs), such as the Provincial Fisheries Office of South Cotabato, provides fingerlings, nets, bancas, life jackets and gears. The Department of Trade and Industry (DTI) has livelihood assistance for women's groups such that they are able to earn from secondary sources of income. Moreover, there are canneries that offer salary loans without interest for its regular workers who wish to try start-up businesses. NGOs help organize self-help groups. Specific to the wives of fishers detained for fishing inside other countries' territories, NGOs provided rice assistance. BFAR 12, after coming up with the fishers' registration, had been doing organizing work (191 groups in Sarangani and 35 in General Santos either as mixed groups or purely women's group), providing them with fishing, livelihood and environmental management projects as well as materials, equipment, technical knowledge and technology.

Capability-building and Training

LGUs, through the Office of the Provincial Agriculturist (OPAG), the Office of City Agriculturist (OCAG) and the Provincial Fisheries Office (PFO), are also working with fishers' groups and, like BFAR, provide capability building and training as well as facilities to improve their skills. They also facilitate training on law enforcement and encourage women to join *bantay dagat* (sea guardians). Even the academe (Mindanao State University with a College of Fisheries and doing extension work) and a non-government organization (Apostleship of the Sea which assists overseas seafarers and detained fishers and their families) also extend assistance by training fishers on fish processing, enterprise development, food processing, and environmental preservation. The latter also assisted them in putting up self-help groups as well as teaching them facilitation skills, giving lectures on VAWC, the Magna Carta of Women (Annex 4), sustainable agriculture, and sustainable fishery (marginal fishing).

The Philippine Fisheries Development Authority (PFDA) in the General Santos Fishport Complex (GSFPC) provides training for livelihood, value adding, Hazard Analysis Critical Control Point (HCCP), Good Manufacturing Practices (GMP), Sanitation Standard Operating Procedure (SSOP) and Gender and Development. The private sector through the Federation of Fishing and Allied Fisheries Industries (SFFAII), an organization composed of eight alliances with more than 100 members, and the local chamber of commerce of General Santos City facilitate training for its members not only in the processing sector but also in the trading sector by inviting resource persons from TESDA. They also conduct conferences and fora which discuss the issues of the fishers and the fishing industry for lobbying and ordinance creation. Canneries also enhance skills of their workers by providing skills training on GMP, HCCP, sanitation, food safety, leadership as well as making studies on the status of women workers in the industry.

Infrastructure and other Facilities

BFAR 12 provides some small processors with starter kits, chopping boards, and other necessary tools. The GSFPC provides the working facilities for men and women who are into the various stages of tuna processing and trading as well as the intermediaries and the financiers. Various structures and facilities had been provided such as clinic, separate toilets for men and women, restaurants, coops, convenience stores, banks, boots, etc. to answer the practical needs of the men and women workers and personnel. In this complex, women are involved not only in traditional women's work but they are now into tagging and delivery of fish, given opportunity to be collectors and checkers, buyers and even in hauling; practices which before were only for men. This is also where the men and women of the Regional Administrative Support Product Certification Unit (RASPCU) apply their function of ensuring that the catch is legally caught and safe for human consumption as this is a landing site for tuna from most fishing grounds.

One company was observed to have a female security guard who does the inspection for women and a male security guard for men. Another company has a breastfeeding room and has separate toilets for men and women. It also has a clinic, comfort rooms and restaurants to cater to the needs of female and male customers and workers.

Marketing Assistance

Government agencies like BFAR, DTI and DOLE assist women in joining international and local trade fairs as well as sell their products in malls. When products are good, DOLE and DTI converge to provide support or assistance in packaging and marketing. BFAR provides weighing scales, stainless fish stalls, stand-alone stall and other paraphernalia for vendors. The academe sends faculty members as resource persons on marketing.

Participation in CDT/EAFM and other Community Activities

BFAR 12 encourages women to become members and officers of organizations. Such organizations are to be registered with BFAR so they can avail of projects. Men can be assigned as president and women can be vice-president or occupy other positions, The BFAR-Regional Administrative Support Product Certification Unit (RASPCU) make women participate in inspection when fishing boats land in fish landing areas. DOLE assists one organization in Barangay. Fatima with wives of fishers as members who availed of a livelihood project. DTI is supporting General Santos Aqua-Marine Producers Association (GAMPA), a 15 small producers organization and Group of Wives of Fishermen (a women's organization formed by a big company to give women income-generating activities to do away with the *bale* (cash advance) system while their husbands at sea.

Moreover, they produce fishing materials utilized by fishers, such as dye bags for fishnets. For some assisted groups, women are into cooking activities, working in the laboratory work for food safety and accomplishing BFAD registration. In the Fish Port Complex, women are now in hauling areas; they do tagging and delivery of fish, are given opportunity to be collectors and checker, a practice which before were only for men. However, men still do the scaling and women deliver to buyers.

There is also the presence of many cooperatives in the complex; and though these are led by both men and women, most officers are women. OCAG does not make distinction between men and women for membership and leadership position in community organizations. The PFO organized five women associations and two mixed associations. OPAG is responsible for the presence of organizations of mixed membership with usually men occupying top positions except in fish processing where women lead. At the provincial level, men are usually in positions of influence while more women officers are found in *municjpios* and barangays. The women's organization manage their alternative livelihood of mudcrab and mangrove plantation projects.

Compliance with Legal Matters and Policies

Some agencies, such as BFAR, see to it that the Fisheries Code, the Magna Carta of Women and Philhealth insurance are complied with in the communities while OCAG monitors compliance of Fisheries Code, Magna Carta of Women and the General Santos City Fisheries Code. DOLE, DTI, GSFPC see to it that beneficiaries of their livelihood projects enjoy GSIS coverage for one year and if project is continued, SSS and PhilHealth

follow, DOLE withheld implementation of D.O. 156 on mandatory minimum wage and social protection benefits because of the unclear employer-employee relationship in the fishing industry. PFPD/GSFPC see to it that fisheries companies provide benefits for their men and women workers, (e.g. SSS and PhilHealth), apply relevant provisions of the labor code and profess awareness of the Magna Carta of Women (Annex 4).

The above-mentioned government agencies are seriously involved in gender mainstreaming, an approach of introducing a gender perspective in agency programs, projects and activities (PPAs) and establishing mechanisms and structures to support its operation as mandated. One company grants maternity leave to its workers, provides one-month salary loan without interest and payable within 6 months. DOLE, DTI, GSFPC see to it that beneficiaries of their livelihood projects enjoy GSIS coverage for one year and if project is continued, Philhealth insurance follows, PFPDA/GSFPC see to it that fisheries companies provide benefits for their men and women workers, (e.g. SSS and Philhealth), apply relevant provisions of the labor code and profess awareness of the Magna Carta of Women. Provisions from the Magna Carta of Women specific to Fisheries and from the Fisheries Code are partially complied with in their work with fishers, processors and traders' sectors. Among these are on women's rights to livelihood, credit, capital and technology, food security and productive resources, social protection and participation and women's right to management and utilization of forest resources, management of protected areas, community-based eco-tourism projects, fisheries and aquatic resources.

Information Dissemination

BFAR provides information on the latest policies, laws, ordinances, and benefits through IEC materials, lectures, during gender sensitivity training; PFPDA through flyers, memos, information frames in malls; DTI holds Tuna Congress, puts up booths, encourage women to join annual trade fairs where they distribute brochures and take in orders, and the Go Negosyo project campaign; OCAG assigns personnel to different coastal barangays or use of regular radio and TV programs for information dissemination; while the private sector Federation of fisheries and allied industries and companies use posters, echo seminars and workshops for their staff and on-the- job trainees (OJT) as information venue.

Technical Assistance/Technology Transfer

BFAR provides technical support through monitoring and evaluating projects of women's organizations; the PFDA through fish preservation techniques; DTI provides laboratory capacity for fish analysis for export products and collaborates with other agencies in upgrading products, branding, labelling as well as being consultant for best-selling, first-selling product buying. DOLE also provides necessary technical assistance while OCAG also provides technical assistance and techno demo.

These gender-focused activities, gender-sensitive officials and leaders, gender-specific laws and ordinances in some ways promote an environment for the attainment of a gender-responsive industry and society; where both men and women participate in and benefit from natural, human and institutional resources.

The abovementioned enabling mechanisms range from policies to human resource development, to financing, marketing and linkages. Closer, focused research must be conducted examine the extent by which these mechanisms are delivered to all value chain node players and to better understand how vertical and horizontal governance can contribute to the upgrading and enhancement of the tuna fisheries value chain.

5. GENDER-RELATED ISSUES IN THE TUNA VALUE CHAIN

This chapter summarizes the gender-related issues that were generated from the results of the Gender Analysis. The issues are categorized into five groups: issues on gender equity and women's empowerment, sustainable fisheries management, CDT, human welfare, and other gender-related issues in the industry.

5.1 Issues on Gender Equity and Empowerment

Inequitable compensation and family-work-personal life imbalance. Tray holders disclosed during the FGDs that they worked from 5.00 in the morning to 11.00 in the evening, with five-minute rest in between jobs. The compensation for an 18-hour work ranged only from 273 PHP to 300 PHP. The workers were not only underpaid, but the extended work-hours kept them from attending to their family and household responsibilities and from enjoying rest and recreation, which are necessary for a healthy, productive and meaningful life. Women were the most adversely affected in this dimension because they are expected to take care of the household chores and attend to the needs of their family in addition to long hours of productive work.

Family-work responsibilities and tasks reduce women's availability for participation in community life. The overwhelming majority of male and female traders were not aware of any fisheries related projects/activities in their community; and of the few who were aware, they claimed that they had never participated in any of the projects. The only time they involved themselves with the community was during social events. Productive responsibilities had already captured most of their waking time so there was not enough time to spare for active involvement in community programs, especially for female traders who have responsibilities at home on top of productive work hours.

Simultaneous and competing demands for productive (market) and reproductive (household) labor time have negatively impacted on women's leisure and sleep/rest. While women are expected to take care of children and household chores in Philippine cultural context, women traders did not allow this cultural expectation to limit the time/labor committed to their businesses. In fact, the average time that female traders spent for productive and reproductive works were relatively higher than those of their male counterparts. Unfortunately, the amount of time spent on productive and reproductive activities negatively impacted other areas of their lives, such as leisure and sleep/rest.

Female traders have higher educational level but, regardless of education, they have less access to profitable markets. Females sell primarily to consumers within the same barangays where they reside because they needed to immediately return home to attend to household chores and child care. Hence, women have limited access to wholesale and assembly markets located far from their hometowns. This was not the case for male traders who have greater mobility because they are not tied down with household responsibilities. This has resulted in income differentials between male from female traders. Men earned on the average 9,375PHP per month from fish trading while women earned about 7,955PHP per month.

Men decide on work matters while women consult spouse and decide on home matters. Male traders maintained that they were not obliged to consult their spouses on matters pertaining to the operations of the trading businesses but found no harm in informing them of the status of the operations considering that the earnings from the businesses were usually turned over to the wives who were responsible for managing the household budget. The female traders who owned the trading entities claimed that they were the primary decision makers for their businesses. However, they claimed that they consult with their spouses out of respect to the position of man as the head of the household. As far as household decision issues are concerned, the

wife/mother makes decisions with regard to food purchase and preparation, budgeting of household income, leisure activities and health matters. Discipline in the family is jointly imposed by both father and mother.

Stereotypes about work still prevail. Most of the physically demanding jobs are still performed by the male traders; however, women claimed to have tasks like weighing, sorting and classifying included in their job description, which are ordinarily undertaken by men. Typically, women's major responsibilities revolve around administrative works like recording and handling sales, salaries and bills. There are an increasing number of female checkers/recorders but male checkers/recorders are still preferred as they are believed to move and work faster than women and can also perform physically demanding tasks.

Beliefs and practices that hinder women's participation in non-traditional roles. Culture and the long history of fishing have contributed to the seemingly perpetual subordination of women in fishing. As long as pregnant or menstruating women are considered bad luck, husbands provide final approval to wives getting paid work, and women are relegated as assistants and appendage to men's work, then women's workspaces will be very limited, hence, it will negatively impact her as a person and as a partner in inclusive development.

5.2 Issues on Sustainable Fisheries Management

Low level of knowledge on tuna and fishery regulations. In the knowledge test, only about 65.72% of the female traders and 64.82% of the male traders provided the correct answers. These percentages are considered rather low and highlights a critical knowledge gap that needs to be addressed. Increasing the level of knowledge among the traders is critical to promote traders' personal safety and interests, to ensure the sustainability of their trading operations, and to promote sustainable fisheries management with the end objective of strengthening the competitiveness of the tuna value chain.

Limited participation of women in EAFM. Women claim that they know BFAR policies/programs like mangrove reforestation, no to dynamite fishing, protection of coral reefs, and the importance of waste segregation. However, their participation in the project cycle (i.e. from program identification, design, implementation and monitoring) spans from none to very limited. Moreover, their representation in bodies related to EAFM is limited. If there are policies towards this end, women lament that these are not implemented. Such is the case in environment councils at various levels of governance.

Limited reach of the EAFM program among implementers. Study respondents believe that most agencies have little awareness of the EAFM program. Even within the agency involved in the program, only those who attend meetings have knowledge of the program.

Limited involvement and engagement of men and women in fishery organizations. Only four out of 40 respondents were members of fishing-related organizations.

Stereotype that men are for bantay-dagat, women are for coastal clean-up activities. The existing community construct about preferred-male-only roles like bantay-dagat is continuously erodes the opportunities for women to engage more actively in EAFM.

Low catch due to overfishing, climate change, coast pirating, illegal fishing nets, missing CRM projects specific for tuna. Low catch means low income for the family and this leaves the woman to take charge of making both ends meet. When there are cash shortages from incomes from the sea, the woman is expected to find ways to put food on the table.

5.3 Issues on Catch Documentation and Traceability

Low level of awareness on CDT. Fishers in General Santos City and Sarangani Province appeared to have low levels of awareness on the concept of Catch Documentation and Traceability (CDT). Some processors and traders have heard about CDT but are not really conversant about its nature. Enablers also revealed having low appreciation and knowledge about CDT. However, with the USAID Oceans project on CDT initiatives, the tuna value chain stakeholders have started to understand its nature and appreciate its significance.

Among the different sectors, the large-scale commercial fisheries sector has the highest awareness on the issue of CDT. It is also apparent from household survey, key informant interviews, and FGDs that several commercial fishers often mistake CDT with the fish landing monitoring program of BFAR through the National Stock Assessment Program (NSAP). These commercial fishers had experience with NSAP enumerators who boarded their vessels in landing sites to record catch data.

Lack of orientation and capacity building on CDT for both implementers and partners. As gathered from interviews, the majority of respondents believed that CDT processes were the responsibility of various other members of the value chain. Intermediaries (brokers, *jambolero*) believe that the PFDA is in charge of documentation because all sales/transactions are recorded and documented in the form of a 'Gate Pass' as fish are transported out of the GSFPC. Processors, they believe that documentation is a responsibility of both DTI and BFAR. Companies that export tuna products, however, often have CDT protocols in place. For example, staff of Citra Mina that was interviewed claimed that women are usually assigned in documentation. Export-oriented companies often have and employ a Catch Documentation Officer. KIIs also revealed that LGU offices, such as the Office of the City Agriculturist (OCAG) and Provincial Fisheries Office could benefit from additional CDT orientations.

Absence of fisheries component in the GAD Code. General Santos City has a GAD Code, but it does not include a fisheries component, particularly on CDT/EAFM of the tuna industry. Ironically, tuna is the city's industry icon considering that it generates much employment and incomes for its constituents.

Perceived additional cost in adopting a new CDT system. It may be the lack of information and knowledge regarding CDT that some concerned sectors are apprehensive and hesitant to wholeheartedly adopt a new CDT system.

Absence of localized institutional CDT mechanism. This mechanism has to be in place and must be user-friendly for more efficient administration and implementation. This issue is interlinked with the issue on IUU fishing for tuna.

Weak information flow along the tuna value chain. Together with poor access to IT, the weak information flow along the tuna value chain is contributory to the poor appreciation of value chain players on the CDT. This necessarily is a gender issue particularly when a certain sector of men and/or women do not have sufficient access to the information.

5.4 Issues on Human Welfare

Vulnerability of women to sexual harassment in male-dominated workplace. During one FGD, a female checker/recorder reported an incidence of sexual harassment in the workplace. This includes inappropriate and unwanted touching, catcalling, and making her the subject of jokes. The reporter further contended that other female checkers had also experienced similar harassments but are just not interested or

are hesitant to report. Moreover, in the absence of clear policies and processes to handle complaints, she opted not to file a formal complaint against her offenders but resorted to cursing, slapping, shaming/humiliating and kicking the offender in public. She maintained that her tactics proved to be effective because the offenders never tried to repeat the improper behavior.

Absence of gender-responsive facilities. Nursing areas at the wet market for women fish vendors, as well as at the GSFPC for the traders are absent. Moreover, places for rest and naps in-between peak periods during the day has adverse effects on health, hence, productivity.

Inadequate social security and insurance. The workers in the informal segment of the tuna value chain are not covered by labor laws, hence, do not have benefits from social security and protection mechanisms such as accident insurance.

Poor working conditions. This includes long hours of standing, night shifts for women, lack of protective gears/clothing, and poor ventilation in processing areas. At sea, men are subject to hazards of the sea and the climate. For those in commercial fisheries, not being able to come home to the family for prolonged period makes for absentee fathers, hence, leaving the mothers/wives to take care of the children and the household needs.

5.5 Other Industry Issues

The value chain maps generated in the study identified industry issues affecting women in as far as low incomes brought home from fishing activities will give her the additional burden of making both ends meet and putting food on the table when there are cash shortages from the sea. The lack of product innovation, lack of processing equipment, unregistered of boats, and the non-accreditation with DTI, FDA and BFAR all contribute to low production and productivity, hence low incomes.

For the small-scale fisheries, one topmost issue is incurring 100% losses when business and employment are adversely affected by climate and man-made disasters. This is evident among self-financed fishers, and when this happens, it is the woman who have to look for credit to defray expenses for both family and the continuance of fishing activities.

For those in the large-scale fisheries, poor fish handling, and poor compliance to CDT as evidenced by the lack of documentation will ultimately affect pricing of the product. If prices are low, then take home pay will be adversely affected. The woman will take charge of filling the family coffers in whatever way she can creatively imagine. Moreover, the long and tedious process in securing fishing permits, and the difficulty in getting Halal accreditation, takes much of the woman's time away from housework and work in the market. The hours spent falling in line in securing permits and licenses mean opportunity costs for the woman.

6. KEY CONSIDERATIONS FOR USAID OCEANS

The primary mission of the Oceans and Fisheries Partnership (USAID Oceans) is to combat illegal, unreported, and unregulated (IUU) fishing and seafood fraud, promote sustainable fisheries, and conserve marine biodiversity. The program aims to improve marine biodiversity conservation and increase the sustainability of Asia-Pacific's international seafood trade through:

a) Catch documentation and traceability;
b) Ecosystem approach to fisheries management;
c) Human welfare: labor rights and gender equality; and
d) Public-private partnerships.

USAID Oceans may be guided by the results of the study on interventions that will address the priority issues listed below and those listed in Section 5.3.

The concept of CDT is quite new to most of the fishers in General Santos City and Sarangani Province. Research revealed that CDT understanding and awareness is lowest among municipal fishers, small-scale commercial fishers, micro- and small-scale fish processors, and municipal fish vendors. The low awareness and understanding of CDT is apparent in both male and female fishers, processors and vendors. Awareness of CDT is relatively higher among commercial fishers that operate handline and purse seines probably because fishing fleets that operate in international waters are required to observe catch documentation protocols (e.g., presence of fish observers, recording of type and volume of catch, fishing ground, fishing effort). Key informant interviews also revealed that some enablers, such as fishery officers in the local government units (e.g., OCAG, Municipal Agriculture Office, Provincial Fisheries Office) and staff of NGAs are not quite confident of their understanding of CDT. There is a need to further educate fishers on CDT concepts, benefits and the importance of such a system in managing fishery resources.

VC players believe that catch recording is an added burden. Respondents in the capture fisheries sector have varied reactions to CDT. In the municipal fisheries sector, fishers expressed apprehension around voluntary catch recording for several reasons, one which was their belief that catch recording would be an added burden after spending several hours or a night at sea. During FGDs in Sarangani Province, many fishers offered to give the task to their wives. Women participants also expressed positive responses to such arrangement.

Awareness of fishers, both men and women, on laws and policies governing CDT is low. Respondents were more aware of EAFM/SFM-related laws such as: prohibition of the use of dynamite and compressor, prohibition against "fishing within 15 kilometers" (by commercial fishing boats), and prohibition in the use of fine mesh nets and catching juvenile fish. Women in municipal fisheries were more aware of these EAFM/SFM policies than their male counterparts; but the inverse was seen in commercial handline fisheries. Some government workers in the fisheries industry who were interviewed also had little knowledge on EAFM. This requires massive education campaigns and capacity building initiatives regarding fishery and aquatic resources management.

Involvement and participation of fishers in community activities and/or policy formulation are similarly low. Participation of municipal fishers, municipal fish vendors, small-scale fish processors, and fishing industry crewmembers and laborers in policy formulation is very low. Both men and women members of the fishing sector do not participate in decision-making. For wives, their reproductive-productive duties leaves them no time for community activities. The male fishers, on the other hand, have less and less time for community functions the more that they spend more days and months at sea.

The poor awareness and participation of municipal and small-scale industry players to EAFM, CDT, policy-making, and other fishery-related activities and programs is probably reflective of their level of organization. While large industry players are organized through the SFFAII, the municipal fishers and small-scale vendors and processors are not as well organized. Women fishers are often organized primarily for livelihood purposes, that is, they group themselves to access capital offered by NGAs to establish micro- and small-scale fish processing facilities. Another observation is the absence of non-government organizations (NGOs) that assist in empowering local communities.

It is in this scenario where local gender champions and leaders could be used to further progress, which have been provided to USAID Oceans, as a result of this research. One area for intervention is capacitating the local value chain players and designating academe (i.e., MSU – General Santos City) as a local partner for engendering the tuna fisheries value chain.

In contrast, the medium- and large-scale industry players are perceived to be active in policy formulation. The alliance of industry members (i.e., SFFAII), owners of large fishing fleets, fish processing plants, traders and exporters have devised a mechanism to make recommendations about the tuna industry. For example, SFFAII organizes the annual National Tuna Congress in General Santos City. At the end of the gathering, the industry members pass resolutions which are submitted to national lawmakers for action.

Section 7 further enumerates other possible interventions that USAID Oceans can take.

7. RECOMMENDATIONS

The following strategic areas for intervention, to empower and build the capacity of women along the tuna fisheries value chain, have been identified as a result of the conducted in-field research. These recommendations are categorized into policy, research, and action measures to address the various gender issues reported in this study. Similarly, incentives for gender sensitive involvement of women to promote CDT and Sustainable Fisheries Management, and for gender-responsive policies, research and action steps for promoting gender equality, equity and empowerment are presented. The recommendations cited below are presented according to the roles of various partners and VC enablers. A summary matrix, available in Annex 6, details these recommendations according to the gender issues identified in Section 5.

7.1 USAID Oceans and Fisheries Partnership

Technical assistance related to capacity building and governance of the tuna value chain are recommended as the two major entry points for USAID Oceans, particularly in areas where local government units and line agencies are not able to provide.

Policy measures:

- Address the issue on the absence of localized institutional CDT/EAFM mechanisms through:
    - Formulation and institutionalization of the Gendered Tuna Development Plan/ Roadmap (i.e. inclusion in the Annual Investment Plan and in the Comprehensive Development Plan)
    - Lobby for the mandatory use of the Harmonized Gender and Development Guidelines (HGDG) in assessing all plans, policies, and programs of agencies/units before these are implemented and/or funded.
    - Collaborate and/or forge Memorandum of Agreement with the Commission on Higher Education and the Department of Education to include in the curriculum the concerns on CDT/EAFM and gender mainstreaming in fisheries and combatting IUU.
    - Engender the Key Data Elements (KDE) of CDT systems.

    - Facilitate data sharing among VC enablers, particularly on those related to IUU and sea fraud.
- Provide support in lobbying for:
    - Gender-responsive policies and regulations at all governance levels in order to protect the rights and welfare particularly women workers in the tuna industry, and to address practical and strategic gender needs at all VC nodes.
    - Inclusion of CDT/EAFM in the GAD code of General Santos City.
    - Establishment of Gender Desks at the GSFPC and other work areas e.g. canneries.
    - Full implementation of ASH Act.
    - Approval of tax credits and similar incentives for organizations that provide gender-responsive facilities in the work areas.

Research initiatives:

- Engage the state universities, colleges and research institutions to:
    - Conduct research in order to widen perspectives on gender and fisheries, and to aid planning and policy making. Possible topics: good practices to combat IUU, and women's role in EAFM, standards and guidelines on Key Data Elements, roles and relationships of men and women in CDT/EAFM.
    - Develop localized and engendered CDT/EAFM Manual for VC players' and enablers' use.
    - Translate research results into publications, policy advisories, products, and program designs that will enhance a gendered CDT/EAFM implementation.
    - Formulate CDT/EAFM training modules for participants in the fisheries value chain, particularly the women.
    - Benchmark on CDT systems and adopt one which is cost-effective and which will not add more burden to the fishers.
- Collaborate with the Philippine Commission on Women to draft customized gender-responsive assessment tools that are dove-tailed to the nuances of the tuna fisheries sector, that is, to include EAFM and CDT concerns.

Action Interventions:

- Development of manuals and modules on gender-responsive approaches/methodologies in:
    - Fisheries project design, implementation and M&E;
    - Evaluation of fisheries project proposals, plans, and policies;
    - Conduct of research in fisheries; and
    - Management of extension and community work.
- Collaborate with local VC enablers on capacity building and gender sensitization activities:
    - Conduct of Training of Trainers on Gender-responsive Value Chain Analysis and on CDT/EAFM in order to create a critical local mass of experts.
    - Mentorship and technology transfer particularly of CDT/ EAFM to local women's groups.
    - Conduct of sensitization workshops on the importance of CDTs and EAFM, targeting both VC players and enablers/implementers.
    - Use of Gender and Development fund for gender mainstreaming in EAFM and CDT, to include activities to combat IUU.
- Create a critical mass of gender-sensitized VC players and enablers.
    - Organize women's groups which will champion and advocate gender-responsive interventions along the VC;
    - Document success stories; and
    - Identify, recruit and train local gender champions on CDT/EAFM.
- Develop and maintain a sex-disaggregated database at all levels of governance by fishery product/sector, that will serve as inputs for policy making and program development.
- Strengthen partnerships with the private sector for increased sustainability through:

- Aggressively campaigning for full compliance with the provisions of the Fisheries Code as amended by Republic Act (RA) 10654 that seeks to "prevent, deter and eliminate illegal, unreported and unregulated" or IUU fishing in the country;
- Forging PPPs in support of combatting IUU and seafood fraud;
- Establishing USAID Oceans' "Program Exit Plan" and a corresponding Action Plan by LGUs; and
- Inclusion of women's representation in bodies involved in policymaking and program development in the tuna industry.

In order to empower municipal and small-scale processors and vendors, more efforts are needed to disseminate information about CDT, EAFM, and their benefits to the stakeholders. Education campaigns should include other enablers such as LGUs and NGAs. Likewise, large industry players (e.g., commercial fishing fleet, canneries, processing plants, traders and exporters) may also need more orientation to improve their understanding of the CDT and EAFM initiatives.

7.2 Local Government Units

The local governments at the barangay, municipal and provincial level will play an important role in the development of a gendered tuna value chain vis-à-vis CDT and EAFM concerns. LGUs will be the overall enabler to steer the industry towards gender equality, equity and women's empowerment, and can support USAID Oceans in implementing the measures defined in Section 7.1. In addition, its other roles are:

Policy Measures:

- Formulate, adopt, and institutionalize (i.e., included in the AIP and CDP) a gendered tuna development plan or roadmap.
- Adoption of flexi-worktime in all enterprises/ employers.
- Resolutions that will address the practical and strategic gender needs (PGNs and SGNs) identified in this report.
- Include in the application requirements for renewal of licenses and permits, the attendance of heads of organizations in basic gender sensitivity trainings and on CDT/EAFM.
- Develop a social insurance scheme for seasonal, contractual, and/or self-employed workers/fishers.

Research Initiatives:

- Conduct impact studies on CDT/EAFM related topics, as basis for planning and intervention.

Action Interventions:

- Include women in policy making and program development bodies/units.
- Capacity building action steps:
  - Develop CDT/EAFM information campaigns for implementers;
  - Conduct orientation of commercial fishers on the CDT system and its importance;
  - Equip the fisheries technician in the LGU-MAO in terms of skills in organizing to enable them to continue building on the gains of NGO partners.
- Recognize and incentivize women's groups/individuals who advocate for greater participation of women in CDT and EAFM, for employers who initiate measures that promote the work-life balance of employees, for those who hire workers based on skills and ability and not based on gender, as well as for VC players who advocate a gender-responsive tuna industry.
- Strengthen collaborations, by:
  - Converging with the other major stakeholders within and outside the industry. The Department of Social Welfare and Development and its programs are very critical points for

convergence. For example, if fishers (laborers in TVAP) are beneficiaries of the Pantawid Pangkabuhayan para sa Pamilyang Pilipino, the LGU can lobby that fishers become members of fisherfolk organizations as part of the retention criteria of the 4Ps beneficiaries. The LGU can then provide assistance to the organized group of women and men fishers.
    - Conducting skills training among small fishers to enable them to engage in other income generating activities outside of fishing. It will take many decades to bring back fisheries at its sustainable level, and the poor in coastal communities need to have other sources of income other than fishing. Accordingly, LGUs can work with DSWD in its Sustainable Livelihood Program to include small fishers/laborers in the processing industry.
    - Seeking the assistance of NGOs to organize fisherfolks, including fish workers in the processing industry.
- Designate a (permanent) GAD focal person in the LGU.

Above all, it is the primordial duty of all LGU levels to align its plans and programs on a gendered tuna industry if it has to maximize outcomes from limited budget and resources, while at the same time combat IUU and sea fraud.

7.3 National Government

The National government is an enabler that may provide the mechanism for gender mainstreaming in the tuna industry. Cited below are specific recommendations, which the Bureau of Fisheries and Aquatic Resources may take. As BFAR will be the lead government agency in the promotion and implementation of the CDT/EAFM, gender sensitization of implementers is crucial.

Policy Measures:

- Make mandatory the use of HGDG tools in the review and enhancement of existing policies and programs related to fisheries in order to address concerns on their relevance and gender-responsiveness.
- Include women/gender in fisheries (e.g., CDT/EAFM) in the national R&D agenda.
- Support the Philippine Commission of Women to review, adopt, disseminate and fund an agenda for women in fisheries in inclusive nation building.
- Incentive schemes to encourage active participation of small-scale participants in tuna related organizations.
- Develop a social insurance scheme for seasonal, contractual, and/or self-employed workers/fishers.

Research Initiatives:

- Support research translation and technology transfer activities.
- Engage state universities and colleges (SUCs) to conduct study on how to use new information technology to strengthen flow of information along the tuna value chain.

Action Interventions:

- Strengthen collaboration with similar and counterpart institutions in the international scene, particularly on the role of women in EAFM and CDT.
- Conduct capacity building activities, including:
    - Increase gender sensitization of employers;
    - Conduct consultation/summit on Women in Fisheries Development;
    - Organize fishers' and women's groups at all VC nodes;
    - Identify, recognize and engage gender champions;

    - Enhance participation of small scale VC players in industry- or chain-wide fora;
    - Use of information technology to facilitate communication and collaboration;
    - Support women workers in the tuna industry to become women entrepreneurs through mentoring activities;
    - Support technology transfer to VC actors; and
    - Promote use of women-friendly gears and technologies.
- Monitor compliance to fishery laws and regulations.

7.4 Private Sector and Industry

As employers, the private sector needs to strengthen its role as a provider of a safe, rewarding and gender-responsive work space for both men and women in the industry.

Policy Measures:

- Support and adopt local resolutions that will open traditionally male-dominated work spaces to women who are capable of the work. Details will include provision of women-friendly tools and equipment, among others.

Research Initiatives:

- Benchmark CDT/EAFM strategies and mechanisms in other areas in order to be able to design a gendered framework and mechanisms in the implementation of CDT/EAFM at the local level.

Action Interventions:

- Conduct capacity building activities, including:
    - IEC campaigns to promote awareness and consciousness on CDT/EAFM on the importance of work-life balance in the workplace, on fishery standards, rules and regulations in the local and international markets, as well as gender policies and issues.
    - Gender Sensitivity Trainings for employers and other VC players.
- Provide better working conditions for women that address their PGNs and SGNs, hence, improve productivity and welfare of the worker.
- Improve the flow of information among the various stakeholders/players along the tuna value chain. Vital information includes fisheries rules and regulations, new technology as well as marketing information like prices, suppliers and buyers.
- Full implement and comply to pertinent laws, including RA 7877 (The Anti-Sexual Harassment Act of 1995) and the Fisheries Code, amended by Republic Act (RA) 10654.

7.5 Educational and Training Institutions

Academe can be a hub to sustain programs and projects amid changes in political and economic landscape. As a venue for learning, knowledge generation and knowledge transfer, the academe is proven to be an apolitical and stable partner for development programs such as sustainable fisheries management.

Policy Measures:

- Include gender and CDT/EAFM in school curricula, whether as a separate course, or as integrated in the teaching of other courses as indicated in course syllabi.
- Include women in fisheries and aquaculture in the R&D agenda.

Research Initiatives:

- Design and develop women-friendly equipment, tools, machineries, and technologies.
- Produce IEC materials based on a needs assessment survey/research such that the IEC are dove-tailed to the psyche of the VC players and enablers.
- Conduct Knowledge, Attitude, Practices, and Skills Survey to aid in planning.

Action Interventions:

- Conduct capacity building activities, including:
    - Gender Sensitivity Trainings for players and enablers of the tuna VC.
    - Write and popularize success stories of women in non-traditional roles.
    - Support transfer of technology to the private sector.
    - Spearhead training for trainers' programs on GAD and gender sensitivity. Despite more than three decades of Women and Gender advocacy in development work, the issue of gender is still not mainstreamed and continues to need stronger advocacy.
    - Formulate training modules for fisherfolk, particularly the women in order to capacitate them and better deal with household and fishing finances, improve their record keeping and documentation, tasks which women have assumed using their natural 'smarts'. Even training for catch sorting and classification can go a long way in increasing skills of women. BFAR can tap the women to do the catch data collection and documentation in fish landings, and other jobs may be created for women in fishing communities with such upgraded skills.
- Recognize and reward women role models.
- Collaborate with other agencies, including the:
    - Commission on Higher Education regarding minimum standards for degree offerings such that gender integration and mainstreaming is ensured.
    - Department of Education for instructional materials to include gender-sensitive modules. More importantly, the use of examples from the tuna fisheries experience on various aspects such as EAFM and CDT will be ingrained in young minds.

7.6 Research Institutions

Academe and Research and Development institutions need to allocate bigger budgets for both basic and applied researches on gender in fisheries and aquaculture. Their importance becomes even more pronounced in the context of declining fish catch, on one hand, and the call for women's empowerment and gender equity, on the other hand.

Policy Measures:

- Lobby for the inclusion of gender in fisheries and aquaculture as a separate and major research area under the Philippine Harmonized National R&D Agenda that is spearheaded by the Department of Science and Technology.

Research Initiatives:

- Conduct research on the following topics:
    - A gendered database by fishery product/sector that will serve as inputs for policymaking and project/program development.
    - An in-depth study that looks at gender relations within the household and in the work sphere. This should surface behavioral and conflict issues that retard women empowerment and contribution to fisheries development. This study has revealed a tendency for male fishers to downplay the role of their wives, as wives report more participation than their husbands credit them for.

Action Interventions:

- Enhance translation of research results into publications, policies, products, and program designs/project cycles.
- Provide the expertise and the technical assistance to LGUs, national agencies and private sector for capacity building activities.

7.7 NGOs, Civil Society Organizations, Fishers/Women's Group

The study found low and almost insignificant roles played by non-government organizations, civil society groups, and of women's associations in the tuna industry. Nevertheless, these are units which have proven to have influence in communities and have led in so many a change both at household and institutional levels. There is an immediate need to organize fishers/women's group and to identify/engage gender champions for CDT/EAFM.

Policy Measures:

- Lobby for gender-responsive policies and regulations at all governance levels in order to protect the rights and welfare particularly women workers in the tuna industry.
- Provide financial assistance for work-related gender-responsive projects that address EAFM and CDT concerns.
- Lobby for measures regarding mandatory provision of protective working gears for workers.

Research Initiatives:

- Design women-friendly programs that address the multiple and inter-sectional situations of women in the tuna VC.
- Develop a social insurance scheme for seasonal, contractual, and/or self-employed workers/fishers.

Action Interventions:

- Organize more women's groups in the barangays to empower women and support their successes in the industry.
- Provide representation for the women in all avenues related to policy making, project identification/design, implementation and monitoring.
- Conduct capacity building activities, including:
    - Conduct skills training, to include off-sea livelihoods in order to provide a wider option to women;
    - Conduct gender sensitivity trainings; and
    - Support women in the tuna industry to become women entrepreneurs through mentoring activities.
- Forge stronger collaboration with other VC enablers for purposes of alignment and harmonization of activities, all intended for gender equity and women's empowerment.
- Monitor employers' compliance to labor laws and regulations.

7.8 Development Assistance Agencies

Development Assistance Agencies generally have a life span that coincides with its projects. Hence, programs must be biased towards those, which are sustainable given local resources.

Policy Measures:

- A program/project exit plan must be known and clear to the tuna fisheries VC players.

Research Initiatives:

- Document success stories for possible replication.

Action Interventions:

- Coordinate with local players with respect to the type of projects/programs to be implemented vis-a-vis local (gender) needs.
- Conduct capacity building activities, including:
    - Fund inter-country researches to widen perspectives on women and fisheries;
    - Introduce women-friendly gears and technologies from other countries; and
    - Facilitate/introduce international collaborative gender-related projects and encourage data sharing.

The abovementioned recommendations are not stand-alone actions but are necessarily collaborative efforts of the various VC players in the tuna industry. Overlaps and duplication have to be minimized, hence, there is a need for a coordinating body/unit to address this risk. It is suggested that the stakeholders and decision makers develop a consensus on the structure and mechanism for CDT/EAFM and gendered tuna VC implementation and sustainability that will live a life longer than the USAID Oceans project.

8. KEY CONCLUSIONS

The concept of catch documentation and traceability, as well as sustainable fisheries management through an Ecosystem Approach to Fisheries Management, is relatively new to both VC players and enablers, with differences in degrees of understanding and appreciation of the subject matter. Commercial male fishers have a higher level of knowledge than all others in the value chain, while female municipal fishers are more aware of fishery resource management. Enablers have an understanding of these concepts, but lack confidence in implementation.

Differences between genders in technical knowledge and skills is not unsurprising, as the study found that various socio-economic and political characteristics define tuna fishing sector, which is still regarded to be male-dominated, despite women's pervasive involvement. Women have limited work spaces, especially in commercial fisheries, are not participants in decision making on matters that affect their lives and livelihood and are unorganized as an interest group that will safeguard human welfare and address gender issues towards attaining gender equity and women's empowerment.

These conditions provide a strong entry point for USAID Oceans' intervention, by way of technical assistance for capacity building and research, as well as for championing an engendered tuna value chain through policy advocacies on gender and CDT/EAFM. Collaboration with other stakeholders and the community of men and women in the industry is crucial, primarily for complementation of efforts and to plan for sustainability after the USAID Oceans closes. A participatory approach is expected, with the VC players at each VC node and type of fishing being involved at all stages of planning/conceptualization, implementation, and monitoring and evaluation of projects, and to continue with re-planning for the next level. The importance of fishers' and women's groups cannot be undermined, especially for those whose voices have been marginal in the past.

The identification and engagement of local gender champions is one strategy to address sustainability concerns. The VC players have to have that sense of ownership of what they do and must have the passion to get engaged as they feel ownership of their undertakings. Recognition and support of these champions, therefore, is recommended for effective and participatory reform.

The formulation and adoption of a Gender-responsive Tuna Development Plan/Roadmap is another important step to pursue. With women included in the development framework, it is expected that more PGNs and SGNs will be addressed. Hence, improving women's status, and enhancing roles and relationships between genders.

Research highlighted the gender differentials present in the industry, based on the six USAID gender domains. The differentials appear to be more pronounced as the size of the fishing enterprise increases. Thus, these findings will serve as jump-off points for baselining and for monitoring (at a later date) how far and how vast has gender mainstreaming and integration happened along the tuna VC. Together with the growth of the tuna industry, should be the promotion of gender equity. Gains from industry growth must be shared across VC players and between male and female actors.

The WINFISH research team, in the process of conducting the Gender Analysis project, has witnessed the willingness, interest, and appreciation of the tuna VC stakeholders to know more about CDT/EAFM, to strengthen collaboration, and to learn more about gender roles and relationships in the industry. The prospect of higher incomes, safer food supply, wider workspaces, and greater involvement of men and women in the affairs of the industry are all drivers for the VC stakeholders to get interested in related interventions by VC enablers led by USAID Oceans.

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ANNEX I. SUMMARY TABLES OF SELECTED RESEARCH FINDINGS

Annex 1-1. Number and percentage (in parenthesis) of respondents, by fishing scale type, gender and position in operation

RESPONDENT	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Owner	5 (45.5)	5 (41.7)	6 (100)	9 (100)	0	0	0	0	0	1 (16.7)
Boat Captain /Operator	1 (9.1)	4 (33.3)	0	0	8 (88.9)	11 (91.7)	0	0	1 (25)	5 (83.3)
Owner/ Operator	4 (36.4)	2 (16.7)	0	0	1 11.1	1 8.3	0	0	0	0
Crew	1 (9.1)	1 (8.3)	0	0	0	0	21 100	15 100	3 (75)	0
Total	11 (100)	12 (100)	6 (100)	9 (100)	9 (100)	12 (100)	21 (100)	15 (100)	4 (100)	6 (100)

Annex 1-2. Demographic characteristics of respondents, by scale of tuna fishing

Characteristic of Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Mean age	44.2	42.4	45.0	42.7	40	44.8	41.6	40.7	45.8	39.8
Civil Status % married	100 %	80%	100%	71.4	100%	100%	100%	100%	100%	100%
Years lived in General Santos City (Median)	29	30	11	30	20	29	17	23	18	28
Education (Median)	Some High school	Some grade school	High school graduate	College graduate	Some High school	Some High school	Some High school	Grade school graduate	Some College	High school graduate
Ethnic group: % Cebuano-Bisaya	73%	67%	67%	56.%	78%	83%	86%	80%	25%	67%
Number living in Household	4.9	4.3	4.5	6.4	5.6	3.7	3.6	4.9	6.8	4.8
Median Income from fishing (in PhP)	4063	5000	40000	33333	11875	15000	3688	6072	20000	15000

Annex 1-3. Percentage of respondents who say tasks are done by either men or women

RESPONDENT	Municipal fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline crew		Purse Seine	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
a) Process registration and legal documents	35	39	53	47	52	48	64	22	50	50
b) Hiring of crew	26	9	100	0	90	0	89	6	30	60
c) Plan the trip	100	0	47	0	100	0	0	0	90	10
d) Prepare the boat and equipment	96	4	93	7	100	0	100	0	100	0
e) Procure diesel	78	17	67	27	100	0	97	3	80	20
f) Buy the baits	65	9	47	13	76	0	3	0	50	0
g) Prepare food and water for the crew	56	44	60	33	90	10	92	8	100	0
h) Prepare the nets and accessories	83	13	47	7	57	0	64	36	80	0
i) Operate the boat engine	100	0	93	0	100	0	97	0	100	0
j) Search for fish or fish school	100	0	93	0	100	0	94	0	100	0
k) Set the net or gear	96	0	60	0	67	0	61	0	80	0
l) Dive	70	0	33	0	52	0	44	0	70	0
m) Haul the net	74	0	33	0	38	0	36	0	80	0
n) Bleeding the tuna	9	4	0	7	38	0	28	0	50	0
o) Beheading the fish	4	0	87	0	24	0	19	0	40	0
p) Sort the catch	52	35	40	67	57	14	58	3	80	0
q) Storage in ice	91	4	93	0	95	0	94	0	90	0
r) Unload the catch	96	4	93	0	100	0	94	0	100	0
s) Weigh the catch	74	22	87	0	95	5	94	0	90	10
t) Grade the catch	26	22	87	0	86	5	86	6	80	20
u) Inspecting	30	30	67	13	71	10	78	3	70	20
v) Labelling	13	13	13	0	29	0	50	3	50	10
w) Negotiate with the buyer	70	30	87	13	90	10	86	8	60	30
x) Transport to the buyer	78	0	67	0	81	5	89	0	80	0
y) Receive payment	52	44	73	27	52	48	72	25	30	60
z) Recording of catch	26	52	60	27	43	57	53	44	50	50
aa) Record keeping of finances	26	52	33	53	38	62	42	56	20	80
bb) Payment of salaries and bills	17	52	33	53	48	48	61	31	10	90
cc) Mend the net or gear	65	13	67	0	52	5	61	0	20	10

Annex 1-4. Number and Percentage (in parentheses) who reported that a fish observer join the fishing operation at sea.

Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Yes	0	0	0	0	1	3	2	0	2	5
No	11	12	6	9	8	9	19	15	2	1
Total	11	12	6	9	9	12	21	1	4	6

Annex 1-5. Number and Percentage (in parentheses) who reported that BFAR enumerators boarded fishing boats to document catch

Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Yes	4 (36)	3 (25)	0	3 (33)	2 (22)	9 (75)	4 (19)	3 (20)	2 (50)	4 (67)
No	7 (64)	9 (75)	6 (100)	6 (67)	7 (78)	3 (25)	17 (81)	12 (80)	2 (50)	2 (33)
Total	11 (100)	12 (100)	6 (100)	9 (100)	9 (100)	12 (100)	21 (100)	15 (100)	4 (100)	6 (100)

Annex 1-6. Number and Percentage (in parentheses) reporting attendance at any of the stated fisheries-related activities

RESPONDENT	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Yes	5 (45.6)	6 (50)	6 (100)	5 (55.6)	6 (66.7)	11 (91.7)	7 (33.3)	8 (53.3)	0	6 (100)
No	6 (54.5)	6 (50)	0	4 (44.4)	3 (33.3)	1 (8.3)	14 (66.7)	7 (46.7)	4 (100)	0
Total	11 (100)	12 (100)	6 (100)	9 (100)	9 (100)	12 (100)	21 (100)	15 (100)	4 (100)	6 (100)

Annex 1-7. Percentage reporting existence of fisheries-related projects in their community

Respondent	Municipal Fisher		Commercial Handline Owner		Commercial Handline Boat Captain		Commercial Handline Crew		Purse Seine	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Yes	46	25	83	44	44	50	38	53	0	17
No	55	75	17	56	56	50	62	47	100	83
Total %	100	100	100	100	100	100	100	100	100	100

Annex 1-8. Percentage of actors who makes decisions on fishing-related matters, by gender of respondent

Respondent	Municipal Fisher						Commercial Handline Owner						Commercial Handline Boat Captain						Commercial Handline Crew						Purse Seine					
	Female			Male			Female			Male			Female			Male			Female			Male			Female			Male		
	S	H	M	W	S	M	S	H	M	W	S	M	S	H	M	W	S	M	S	H	M	W	S	M	S	H	M	W	S	M
Purchase of fishing gears	27	54	0	0	75	25	0	83	17	11	67	11	0	56	22	0	67	17	10	62	14	0	67	13	0	0	75	0	17	50
Fishing area	18	82	0	0	92	8	0	33	50	0	11	78	11	67	0	0	83	17	0	19	62	0	7	80	0	25	75	0	33	50
Financing operations	18	36	19	0	8	33	17	17	17	0	67	11	0	11	56	0	25	42	0	0	43	0	7	33	0	0	75	0	17	83
Marketing catch	27	27	18	8	67	17	0	50	33	0	67	11	0	0	56	0	17	33	0	0	43	0	7	33	0	0	75	0	0	67
Pricing	18	27	18	8	50	17	0	0	67	0	11	67	0	0	56	0	8	50	0	0	43	0	7	40	0	0	75	0	0	50
Timing fish operations	18	64	0	0	92	8	0	50	17	0	22	67	11	44	22	0	92	8	0	0	86	0	7	67	0	0	50	0	33	50
Hiring workers	18	27	0	0	25	25	0	17	67	0	33	56	11	0	33	0	58	17	0	0	67	0	7	53	0	0	67	0	0	67

Legend: S – self; H – husband; M – male coworker; W – wife; S – self; M – male coworker

Annex 1-9. Demographic characteristics of respondents, by type of processor

Characteristic of Respondent	Canned		Frozen		TVAP	
	Female	Male	Female	Male	Female	Male
Mean Age (years)	36	34	32	33	44	28
Civil Status (number and %)						
Single	1 (10)	3 (30)	3 (23)	5 (42)	1 (6)	6 (46)
Married	7 (70)	6 (60)	9 (69)	7 (58)	13 (77)	4 (31)
Widow					1 (6)	
Live-in	2 (20)	1 (10)	1 (8)		2 (12)	3 (23)
Total	10 (100)	10 (100)	13 (100)	12 (100)	17 (100)	13 (100)
Educational attainment of respondent						
Some grade school	1 (10)	1 (10)				2 (15)
Grade school grad		1 (10)			2 (12)	1 (8)
Some high school		2 (20)				3 (23)
High school graduate	2 (20)	2	2 (15)	4 (33)	4 (24)	6 (46)
Vocational schooling		2 (20)		2 (17)		
Some College	2 (20)	1 (10)	2 (15)	1 (8)	2 (12)	1 (8)
College graduate	5 (50)	4 (40)	9 (70)	5 (42)	9 (53)	
Total	10 (100)	10 (100)	13 (100)	12 (100)	17 (100)	13 (100)
Educational attainment of spouse						
Some grade school					2 (25)	
Grade school grad		1 (11)		2 (20)	1 (12)	2 (14)
Some high school		1 (11)			1 (12)	1 (7)
High school graduate	3 (43)	2 (22)	1 (14)		3 (38)	3 (21)
Vocational schooling				2 (20)		2 (14)
Some College	1 (14)	2 (22)	2 (29)	2 (20)	1 (12)	1 (7)
College graduate	3 (43)	3 (33)	4 (57)	4 (40)		5 (36)
Total	7 (100)	9 (100)	7 (100)	10 (100)	8 (100)	14 (100)
Ethnic group						
B'laan						3 (23)
Cebuano-Bisaya	7 (70)	4 (40)	12 (92)	7 (58)	13 (76)	5 (38)
Ilocano	1 (10)			1 (8)		
Ilonggo	1 (10)	1 (10)	1 (8)	1 (8)	3 (18)	2 (15)
Maguindanaoan		1 (10)				
Maranao				1 (8)		
Tagalog				1 (8)		
Tausug						1 (8)
Tboli	1 (10)	1 (10)				
Others		3 (30)		1 (8)	1 (6)	2 (150
Total	10 (100)	10 (100)	13 (100)	12 (100)	17 (100)	13 (100)

Annex 1-10. Approximate Number and Percentage (in parentheses) of monthly income from fish processing

Income (in Pesos)	Canned		Frozen		TVAP	
	Female	Male	Female	Male	Female	Male
0 -2000						
2001 - 5000	2 (20)	1 (10)	2 (15)		4 (23)	6 (46)
5001 - 10000	2 (20)	2 (20)	7 (54)	10 (83)	1 (6)	4 (31)
10001 - 15000	5 (50)	2 (20)	4 (31)		2 (12)	3 (23)
15001 - 20000	1 (10)	3 (30)		2 (17)	3 (18)	
20001 - 25000		1 (10)				
25001 - 30000					2 (12)	
30001 - 50000		1 (10)			3 (18)	
50001 - 100000					1 (6)	
above 100000					1 (6)	
Total	10 (100)	10 (100)	13 (100)	12 (100)	17 (100)	13 (100)

Annex 1-11. Number and Percentage (in parentheses) of Processors' Level of Knowledge on tuna and fishery regulations

Statements	Female		Male	
	True	False	True	False
CANNED				
Hot-Smoked tuna is carcinogenic	5 (50)	5 (50)	4 (40)	6 (60)
The Food Drug Administration requires processing plant to be registered	10 (100)		10(100)	
Application of Philippine National Standard for processed tuna is mandatory	10 (100)		10(100)	
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.	8 (80)	2 (20)	8 (80)	2 (20)
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.	4 (40)	6 (60)	2 (20)	8 (80)
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish	9 (90)	1 (10)	8 (80)	2 (20)
Average Percentage of Respondents Who Got the Correct Answers	80%		80%	
FROZEN				
Hot-Smoked tuna is carcinogenic	7 (54)	6 (46)	2 (17)	10 (83)
The Food Drug Administration requires processing plant to be registered	13 (100)		12 (100)	
Application of Philippine National Standard for processed tuna is mandatory	13 (100)		12 (100)	
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.	10 (77)	3 (23)	10 (83)	2 (17)
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.	1(8)	12 (92)	1 (8)	11 (92)
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish	12 (92)	1 (8)	9 (75)	3 (25)

Average Percentage of Respondents Who Got the Correct Answers	85. 83%		77.83%	
TVAP				
Hot-Smoked tuna is carcinogenic	11 (65)	6 (35)	4 (31)	9 (69)
The Food Drug Administration requires processing plant to be registered	17 (100)		13 (100)	
Application of Philippine National Standard for processed tuna is mandatory	15 (88)	2 (12)	13 (100)	
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.	10 (59)	7 (41)	11 (85)	2 (15)
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.	5 (29)	12 (71)	6 (46)	7 (54)
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish	8 (47)	9 (53)	12 (92)	1 (8)
Average Percentage of Respondents Who Got the Correct Answers	71.66 %		77%	

Annex 1-12. Number of Hours per Day Spent by Male and Female Processors on Various Activities

Type of Product	Statistics	Number of Hours per Day									
		Productive		Reproductive		Sleep/Rest		Community		Leisure	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Canned	Mean	11.2	11.4	4.1	3.8	7.5	8.2	0	0	1.2	0.6
	Std Dev	1.3	1.5	1.6	1.3	1.4	1.0	0	0	1.3	0.8
	Minimum	9	9	2	3	4	6	0	0	0	0
	Maximum	13	13	8	7	9	10	0	0	3	2
Frozen/ Chilled	Mean	11.4	10.4	3.0	4.2	8.8	8.6	0	0	0.8	0.8
	Std Dev	1.6	1.7	1.0	1.8	1.2	1.6	0	0	0.9	0.8
	Minimum	8	9	2	2	7	7	0	0	0	0
	Maximum	13	15	5	7	11	11	0	0	3	2
TVAP	Mean	10.4	10.0	4.4	4.9	8.6	8.3	0	0	0.6	0.8
	Std Dev	2.8	2.4	1.4	1.7	1.1	1.4	0		0.8	0.8
	Minimum	7	4	1	2	6	6	0	0	0	0
	Maximum	17	13	6	8	10	11	0	0	2	2

Annex 1-13. Demographic characteristics of trader-respondents

		Male		Female		Total	
		F	%	F	%	F	%
Age	Mean	38		40			
	Median	34.5		41.5			
	Std dev	11.4		13.7			
	Min	19		19			
	Max	60		65	49	45	100
Civil Status	Single	6	27	4	17	10	22
	Married	14	64	17	74	31	69
	Separated	1	5	0	0	1	0
	Widow	0	0	1	4	1	2
	Live-in	1	5	1	4	2	4
Educational Attainment	Some grade school	0	0	2	9	2	4
	Grade school graduate	4	18	1	4	5	11
	Some high school	7	32	3	13	10	22
	High school graduate	5	23	6	26	11	24
	Vocational schooling	2	9	2	9	4	9
	Some college	4	18	8	35	12	27
	College graduate	0	0	1	4	1	2

Ethnic Group	B'laan	1	5	0	0	1	2
	Cebuano-bisaya	15	68	18	70	33	73
	Ilocano	1	5	0	0	1	2
	Ilonggo	3	14	0	0	3	7
	Maguindanaoan	1	5	1	4	2	4
	Maranao	0	0	1	4	1	2
	Tausug	1	5	0	0	1	2
	Others	0	0	3	13	3	7
Length of stay in General Santos	Mean	22.9			27	25	
	Std dev	14.4			17.3	15.9	
	Min	1			1	1	
	Max	50			58	58	

Annex 1-14. Sex-Disaggregated Data on GSFPC Personnel, as of February 2017

Clients Served	Accredited	Permit To Conduct Business (PTCB)			Others (Lost ID, Replacement ID only)	
		M	F	Company	M	F
Cold Store				1		
Commercial				1		
Company Classifier		1				
Employee		65	33		2	
Fisher		3				
Food Seller			1			
Helper		1	4			
Janitor		1				
Laborer		523	65		8	
Market Traders (broker, trader, Financier, jamboler, supplier, dispatcher)	6	292	138	17	10	1
Owner		1			6	
Production Worker		36	36			
Representative		6	4			1
Trucking Services		1				
Grand Total	6	930 (76.8%)	281 (23.2%)	19	26	2
		1211		19	28	

Annex 1-15. Monthly Income from Fish Trading (in Philippine Peso)

Monthly earning (in Pesos)	Female		Male		Total	
	Number	%	Number	%	Number	%
0 -2000	0	0	0	0	0	0
2001 – 5000	5	22	4	18	9	20
5001 – 10000	11	49	8	35	19	42
10001 – 15000	4	17	4	18	8	18
15001 – 20000	1	4	3	14	4	9
20001 – 25000	0	0	1	5	1	2
25001 – 30000	1	4	0	0	1	2
30001 – 50000	1	4	1	5	2	4
50001 – 100000	0	0	0	0	0	0
above 100000	0	0	1	5	1	2
Total	23	100	22	100	45	100

Annex 1-16. Family Labor in Fish Trading

Family Member	Number	Age	Is Labor Paid?		Type of work?	
			Yes	No	Supervisory	Labor
Spouse	24	17 -77 (40.7)	13	11	4	20
Son	11	10-46 (23.9)	7	4	0	11
Daughter	3	15-27(21.3)	2	1	0	3
Father	0	0	0	0	0	0
Mother	0	0	0	0	0	0
Niece	0	0	0	0	0	0
Nephew	1	12	0	1	0	1
Grandfather	0	0	0	0	0	0
Grandmother	0	0	0	0	0	0
Daughter In-law	1	36	1	0	0	1
Son-in-law	0	0	0	0	0	0

Annex 1-17. Employment Status of Hired Labor by Traders

Type of respondent	Employment status	Peak Season (figures in %)			Off Season (figures in %)		
		Male	Female	Average	Male	Female	Average
Female	Regular	32	22	27	27	23	25
	Contractual	68	78	73	83	77	80
Male	Regular	18	10	14	17	10	13
	Contractual	82	90	86	83	90	86

Annex 1-18. Buyers of Traders

Type of buyer	Female		Male	
	Sex		Sex	
	Male	Female	Male	Female
Local Restaurants	1	0	3	2
Other Local institutional buyers	1	0	1	0
Exporters			1	1
Buying offices of exporters				
Other wholesalers			1	0
Other wholesalers-retailers				
Retailers/Supermarkets			2	1
Small-scale market vendors	1	1	3	4
Processors	1	1	2	1
Households	22	22	19	19
Tourists	2	0	1	0

Annex 1-19. Gender of Suppliers of Fresh Tuna

Type of respondent	Type of supplier	Mean	Median	Std Dev	Min	Max
Female	Men	58	60	22	0	85
	Women	42	40	22	15	100
Male	Men	65	70	23	0	100
	Women	35	30	23	0	100
t-value = -0.952 p-value = 0.346						

Annex 1-20. Number and Percentage (in parentheses) of Traders' Level of Knowledge on Tuna and Fishery Regulations

Statement	Correct Answer	Female		Male		Chi square value	p-value
		True	False	True	False		
Smoked tuna is carcinogenic	True	14 (61)	9 (39)	10 (46)	12 (54)	1.07	0.300
The Food Drug Administration requires processing plant to be registered	True	22 (96)	1 (4)	21 (96)	1 (4)	0.001	0.974
Application of Philippine National Standard for processed tuna is mandatory	True	20 (87)	3 (13)	19 (86)	3 (14)	0.003	0.953
Tuna is a migratory fish	True	18 (78)	5 (22)	16 (73)	6 (27)	0.186	0.666
Commercial fishers are not allowed to fish within 15km municipal water	True	17 (74)	6 (26)	20 (91)	2 (9)	2.22	0.136
The legal size for purse seine to catch tuna is 3cm	False	14 (61)	9 (39)	14 (64)	8 (36)	0.037	0.848
The city government requires the registration of purse seine	False	20 (87)	3 (13)	21 (96)	1 (4)	1.003	0.317
Skipjack is a kind of tuna	True	14 (61)	9 (39)	14 (64)	8 (36)	0.037	0.848
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.	False	17 (74)	6 (26)	15 (68)	7 (32)	0.180	0.672
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch log sheets.	False	7 (3)	16 (70)	8 (36)	14 (64)	0.178	0.673
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish	True	16 (70)	7 (30)	19 (86)	3 (14)	1.836	0.175
Average Percentage of Respondents Who Got the Correct Answers		47.91%		49.27%			

Annex 1-21. Number and Percentage (in parentheses) of Traders' Beliefs

Statements	Female			Male			Chi square value	p-value
	Agree	Disagree	Neither Agree nor Disagree	Agree	Disagree	Neither Agree nor Disagree		
Women are more skillful in trading than men	18 (78)	1 (4)	4 (17)	13 (59)	5 (23)	4 (18)	3.45	0.178
Women are easier to deal with than men in the trading business.	20 (87)	2 (9)	1 (4)	13 (59)	6 (27)	3 (14)	4.46	0.107

Men are more particular about quality of tuna traded than women.	14 (61)	5 (22)	4 (17)	10 (45)	9 (41)	3 (14)	1.93	0.381
Women are more efficient in trading than men.	17 (74)	4 (17)	2 (9)	13 (59)	7 (32)	2 (9)	1.33	0.514

Annex 1-22. Number and Percentage (in parentheses) of Traders' Perception about Purchase Behavior of Buyers of Fresh Tuna

Behaviors	Female		Male		chi square	p-value
	Female	Male	Female	Male		
Who is stricter with product quality	12 (71)	5 (29)	11 (73)	4 (27)	0.030	0.863
Who is easier to negotiate with	10 (59)	7 (41)	8 (53)	7 (47)	0.098	0.755
Who is more serious in complying with agreed sales conditions ((e.g. delivery schedule, packaging and labeling requirements, quality standards, etc.)	9 (53)	8(47)	7 (47)	8 (53)	0.125	0.723
Who is more firm with their decisions	9 (53)	8 (47)	2 (13)	13 (87)	5.542	0.019

Annex 1-23. Activities Performed by Male and Female Traders

Activity	Female		Male		chi square	p-value
	Men	Women	Men	Women		
Administrative work						
Process registration and legal documents	3 (13)	17 (74)	12 (55)	6 (27)	10.5900	**0.0010**
Hiring of workers	5 (22)	8 (35)	8 (36)	3 (14)	2.8200	0.0980
Receive payment	0 (0)	21 (91)	13 (59)	9 (41)	17.7900	-
Record of sales	1 (4)	15 (65)	10 (46)	8 (36)	9.4100	**0.0020**
Record of financial transactions	1 (4)	14 (61)	10 (46)	8 (36)	8.8000	**0.0030**
Record production	2 (9)	12 (52)	8 (36)	5 (23)	6.4500	**0.0110**
Inventory of stocks	0(0)	13 (57)	11 (50)	5 (23)	14.4000	-
Payment of salaries and bills	0(0)	19 (83)	12 (55)	5 (23)	20.1200	-
Marketing						
Identify suppliers of fresh tuna	10 (43)	13 (57)	17 (77)	4 (18)	6.5000	**0.0110**
Identify suppliers of processed tuna	11 (48)	6 (26)	10 (45)	3 (14)	0.5200	0.4690
Identify buyers of fresh tuna	8 (35)	12 (52)	17 (77)	4 (18)	7.2200	**0.0070**
Identify buyers of processed tuna	7 (30)	7 (30)	8 (36)	5 (23)	0.3600	0.5470
Negotiate with the buyer	5 (22)	16 (70)	17 (77)	4 (18)	13.7500	-
Look for supplier of tuna	11 (48)	11 (48)	19 (86)	3 (14)	6.7100	**0.0100**
Transport to the buyer	10 (44)	1 (4)	12 (54)	1 (5)	0.0200	0.9020
Load and Unload products	20 (87)	2 (9)	22 (100)		2.1000	0.1480
Weigh, sort and classify products	4 (17)	18 (78)	19 (86)	3 (14)	20.5000	-
Pack	2 (9)	12 (52)	7 (32)	3 (14)	7.7300	0.0050
Label	1 (4)	4 (17)	6 (27)	4 (18)	2.1400	0.1430
Production						
Remove the guts and gills	9 (39)	12 (51)	19 (86)	1 (5)	12.8600	-
Operate equipment	5 (22)	5 (22)	10 (46)	2 (9)	2.7900	0.1000
Ensure quality control	3 (13)	14 (61)	13 (59)	5 (23)	10.4900	0.0010
Cook	1 (4)	5 (22)	1 (5)	4 (18)	0.0200	0.8870

Blast freezing	7 (30)		1 (5)	6 (24)			0.8100	0.3690
Storage	9 (39)		3 (13)	13 (59)			3.6900	0.0600
Clean and maintain physical facilities	6 (26)		14 (61)	19 (86)		2 (9)	15.7400	-

Annex 1-24. Institutions, Practices and Services Providing an Enabling Environment in the Attainment of Gender Equity and Women's Empowerment in the Tuna Value Chain

ENABLERS	NODES					
	Producers		Processors		Traders	
	M	F	M	F	M	F
I. Financing/Livelihood Assistance						
A. Government Agencies						
1. *Bureau of Fisheries and Aquaculture Resources (BFAR) 12*						
Provides fishing needs: fingerlings, nets, bancas, life jacket, gears		x				
2. *Department of Trade and Industry (DTI)*						
Livelihood Assistance: for women's groups as well as mixed groups. e.g. A group of women who are wives or daughters of fishers are assisted in their livelihood activity making dye bags and gloves to avoid "*bale bale*" (cash advance) and Muslim-Christians associations are given sewing machines and trained on pricing and costing, entrepreneurship, packaging.					x	x
3. *Department of Labor and Employment (DOLE)*						
Gives livelihood assistance grants, starter kits, nego karts,						x
Links up their beneficiaries with other agencies (e.g TESDA, DTI) depending on needs					x	x
B. Local Government Unit (LGU)						
1. Provincial Fisheries Office (PFO) of South Cotabato does not provide cash but based on needs analysis, target is the family, for aquaculture they provide for fisherfolks, fingerlings, nets, *bancas* with life jacket, fishing gears. The basis for assistance is whatever is needed in the area.	x	x				
C. Others/Private Sector						
1. Canneries			x	x		
One company provides salary loan for regular workers equivalent to one month payable in 6 months without interest						
2. Non-Government Organization (NGO)						
Encourages groups to have saving scheme, organized self-help groups				x		
Provides rice assistance to wives of detained fishers				x		
II. Capability-building/Training						
A. Government Agencies						
1. BFAR 12						
Aquaculture training, regulatory training	x	x				
GAD is integrated in projects and programs and activities				x		
2. DTI						
Training for packaging, labelling and accessing credits			x	x		
For Big Exports – (1) updates on General System Products (GSP) on taxation of export products, tariff for Europe, accreditation for food safety 2) Micro and small industry – tuna processing such as cutting of tuna, *chorizo* (60/40 more women), food safety (more men), spearhead training for MSME, sensory analysis of fish (mixed groups), assistance for BFAD registration in Koronadal (50/50%), training on tuna processing (choice cut, crazy cut) cutting on the side			x	x	x	x
4. General Santos Fish Port Complex (GSFPC)						
Provides training for livelihood such as Hazard Analysis Critical Control Point (HACCP), Good Manufacturing Practices/Housekeeping (GMP), Sanitation Standard Operating Procedure (SSOP)			x	x		
Tuna value added training with Gender and Development (GAD) integration				x		
B. LGU						
1. Office of City Agriculturist (OCAG)						
Provides Value-added training: food processing e.g., *Chorizo* and *Embutido* and other processed products that are tuna or fish- based; , custom-make other modules according to need			x	x		

Together with BFAR gives orientation on pros and cons of dynamite fishing and other forms of illegal fishing as well as on law enforcement	x	x				
2. PFO						
Provides training on feeding, feeding formula, correct stocking, commercial fishing;	x	x				
Post-harvest: smoking, smoking, drying, de-boning, value adding, seaweeds, pickles, soap-making		x				
Coordinates with the region on law enforcement: organizing *bantay dagat* (guardians of the sea), with marine coast guards	x	x				
3. OPAG						
Conducts capacity-building but relies on BFAR for material support; training on law-enforcement, GAD training for batches, and also integrates this during RIC training.		x				
Provides training for wives of fishers on processing and value-adding		x				
C. Private Sector/Others						
1. SOCKSARGEN Federation of Fishing and Allied Fisheries Industries, Incorporated (SFFAII)						
Facilitates training through TESDA					x	x
Facilitates training on entrepreneurship					x	x
2. Canneries						
Factory workers are provided orientation on "loining" section				x		
Provided training on Good Manufacturing Practices (GMP) sanitation, better process controls, and Hazard Training (HACCP), Food Safety, Leadership, Occupational Health and Safety, GMP/SSOP Orientation			x	x		
3. Academe						
Training on fish processing, enterprise development, food processing, environmental preservation		x				
4. NGO						
Provides training on facilitation skills, Violence Against Women (VAWC), sustainable agriculture, sustainable fishery (marginal fishing)	x	x				
5. Women's Organization						
Financial management: part of member wives' earning is used for capital for another fishing trip		x				
III. Infrastructure/Facilities						
A. Government Agencies						
1. *BFAR*						
Facilities/infrastructure provided smokehouse, portable smoke house, - processing starter kit, chest freezer.		x		x		
2. *DTI*						
Provides equipment such as silent cutter, vacuum packer, grinder, as well bring in services of other agencies and machines such as sewing machine			x	x		
3. *GSFPC*						
Provides infrastructure and support services, space for various stages of processing utilized by men and women, separate comfort rooms for men and women, clinic, restaurants, cooperatives, banks, ice plants, boots for everyone - to answer needs of workers and customers			x	x		
B. LGU						
1. PFO: Facilitated facilities provided by BFAR such as smoke houses, freezer, vacuum packer,			x	x		
2. OPAG						
Existence of a budget for fish landing centers	x					
Provides assistance to men operating fish cages	x					
C. Private Sector/Others						
1. Canneries: The facility is gender-sensitive. Presence of female security guard for inspecting women workers and male security for men; Provides breastfeeding room for mothers, separate toilets for men and women, provide necessary tools and materials regardless of sex			x	x		
2. Academe: Use of College of Fisheries building			x	x		
IV. Marketing Assistance						
A. Government Agencies						
1. BFAR 12: Encourages women to join local and international trade fair, mall exhibits and provide them with starter kits for small processors, , chopping board, gloves, *palanggana* (basin), weighing scales, stainless fish stall, and stand-alone stall, cladding on top of the table				x		x

B. LGU						
1. OCAG: Makes referrals to fish processors in response to queries from public. They are made to attend trade fairs			x	x		
2. PFO: Puts up a booth to display women's products in a trade fair						x
C. Others						
1. Academe: Some faculty members serve as resource persons on marketing; Women's organizations collaborate with college of Business Administration				x		x
2. Women's Organization: Encourage their women members to get orders for dried fish from offices and compradors				x		x
V. Participation in the workforce, community organization, CDT/EAFM activities						
A. Government Agencies						
1. BFAR 12						
Women encouraged to become members and officers of organizations. And such organizations to be registered with BFAR so they may avail of projects. Men can be assigned as president and women can be vice-president or occupy other positions,	x					
2. BFAR-Regional Administrative Support Product Certification Unit (RASPCU)						
Women participate in inspection when fishing boats land in fish landing areas	x	x				
3. DOLE						
Assists one organization in Brgy. Fatima with wives of fishers as members and who availed of a livelihood project				x		
4. GSFPC						
Women are now in hauling areas, they do tagging and delivery of fish, given opportunity to be collectors and checker, a practice which before were only for men, In production, men do the scaling and women deliver to buyers.	x	x	x	x	x	x
Presence of many cooperatives in the complex led by both men and women while most officers are women			x	x	x	x
B. LGU						
1. OCAG: No distinction between men and women for membership and leadership position	x	x	x	x		
2. PFO: existence of 5 women associations, 2 mixed associations	x	x	x	x		
3. OPAG: Presence of organizations of mixed membership with usually men usually occupying top positions except in fish processing where women lead. At the provincial level men are usually in positions of influence while more women officers are found in *municipio* and barangays	x	x	x	x		
C. Others/Private Sector						
Women's organization: existence of 1 women's association				x		
VI. Compliance of Legal Matters and Policies						
A. Government agencies						
1. PFDA/GSFPC: Legal and social protection: The fishing companies provide benefits for both men and women, e.g. SSS, PhilHealth, apply the Labor Code and aware of the Magna Carta of Women. GAD indicators are incorporated in all programs, policies and plans			x	x		
2. DOLE: Beneficiaries of livelihood programs have GSIS coverage for one year. Thereafter if project is continued, Philhealth and SSS are provided			x	x	x	x
3. BFAR 12: In the office: SSS, Philhealth membership, in the communities, compliance of fisheries code, Magna Carta of women, fisherfolk registration; Philhealth handled by DSWD						
4. DTI: Labor code discussed during GAD seminars, Go Negosyo, rights of employees, SSS, Philhealth membership, less taxation from BIR						
B. LGU						
1. OCAG: Compliance **of** Pag-ibig, Philhealth Membership (includes even job order employees who are encouraged to apply to SSS for social protection. Compliance with fisheries code and Magna Carta of Women and the City Fisheries Code.	x	x	x	x	x	x
2. PFO: SSS, GSIS, Philhealth membership, compliance of labor code, provision of group health insurance like Maxicare	x	x	x	x	x	x

3. OPAG: SSS, GSIS, Philhealth membership, compliance with labor code, provision of group health insurance like Maxicare	x	x	x	x	x	x
C. Others/Private Sector						
1. Academe: GSIS, SSS, Philheath membership, compliance of labor code, GAD activities had been scheduled for the year, health issues and value added incorporated in lectures						
2. Canneries: 1) SSS, Philheath, Pag-ibig membership, annual physical examination, health insurance, follows BFAR regulations since it is a fishing industry, re Magna Carta of Women, the company has equal treatment of men and women. 2) both : SSS, Philheath, HMO, Paternity Leave, other provisions of labor code, Magna Carta of Women			x	x		
3. Association of Industry Players: 1) SSS, Philheath membership, compliance of labor code, no conscious effort on following provisions of the MCW; 41% who attended the Tuna Congress were women			x	x	x	x
4. NGO: SSS/PhilHealth membership/compliance of other provisions of the labor code	x	x	x	x		
5. Women's Organization: SSS for self-employed, PhilHeath membership, Frame (a mortuary package), Magna Carta of Women: existence of Barangay. Women's and Children's Protection Desk, existence of Brgy. Committee on Women, fisheries code: not yet		x		x		x
VIII. Information Dissemination						
A. Government Agencies						
1. BFAR: for all though; however since most fishers are men, it is they who get more informed; Information on latest policies, laws, ordinances, benefits, etc. through IEC materials, lecture, during Gender Sensitivity Training	x	x	x	x	x	x
2. PFDA/GSPFPC: Directed towards general population through flyers, memos and frames in malls						
3. DTI: Hold tuna congress (mostly women attend), put up booths, join annual trade fairs (mostly women join) and where they distribute brochures and take in orders, Go Negosyo project campaign,	x	x	x	x	x	x
B. LGUs						
1. OCAG: personnel assigned to different coastal barangays to coordinate with barangay council; through media such as regular radio and TV program	x	x	x	x	x	
C. Others/Private Sector						
1. SFFAI: disseminate information through government organizations they work with, use of posters and other paraphernalia	x	x	x	x	x	x
2. Canneries: Re-echo training, seminars and workshops to staff and workers, information included in OJT of trainees			x	x	x	x
3. Academe: Collaborate with other agencies in some projects (e.g. fish farm), to staff and their families	x	x	x	x	x	
VIII. Technical Assistance/Technology Transfer						
A. Government Agencies						
1. BFAR 12: Technical support through monitoring and evaluating women's organization projects		x				x
2. PFDA/GSPFPC: Technical support for both men and women; e.g. Fish preservation (condition of the fish, preservation, time and temperature			x	x		
3. DTI: technical support in the form of assisting laboratory (private companies) capacity for fish analysis for export products where usually women are laboratory technicians; for technology transfer, collaborates with other agencies in upgrading products , branding, labelling,, consultant for best-selling, first selling product-buying			x	x	x	x
B. LGUs						
1. OCAG: Technical assistance and techno demo are interlinked (e.g after BFAR gives inputs fingerlings, hook and line fishing paraphernalia to beneficiaries, technical assistance is coupled with technology or how to do it	x	x				
C. Others/Private Sector						
1. Canneries: Engineers attend annual conventions on updating in engineering technology and advancement and re-echo knowledge and skills to staff and workers			x	x		
2. NGO: Training for women on marginal fishing, rice propagation and water system	x					

ANNEX 2. SURVEY QUESTIONNAIRES

Fishers and Operators

SURVEY QUESTIONNAIRE
Set A: FISHERS AND OPERATORS

Screening Question?	1) May I know the nature of your work? A - Captain of a fishing boat/vessel B - Fisher C - Crew/labor/worker of a fishing operation If respondent answered A or B, proceed to Question No. 2 If respondents answered C, terminate interview and replace respondent 2) Do you fish for tuna? __ Yes___ No If answer is YES, proceed with the interview If answer is NO, terminate interview and replace respondent
Socio-demographics	***For respondent*** What is your name: Address (in General Santos City): Address (outside General Santos City): How many years have you lived in General Santos City? ___ years Sex: __ Male __ Female Highest educational attainment : __ No formal schooling __ Some grade school __ Grade school graduate __ Some high school __ High school graduate __ Some college __ Vocational schooling __ College graduate __ Post Graduate Civil Status: __ Single __ Married __ Separated __ Widow/Widower __ Live-in Ethnic group: __ Bicolano __ Cebuano-Bisaya __ Ilocano __ Ilonggo __ Tagalog __ Waray __ Badjao __ B'laan __ Maguindanaoan __ Maranao __ Tausug

__ T'boli
__ Others, specify _____

About spouse/partner of respondent, if applicable:

Sex: __ Male
__ Female

Highest educational attainment :
__ No formal schooling
__ Some grade school
__ Grade school graduate
__ Some high school
__ High school graduate
__ Some college
__ Vocational schooling
__ College graduate
__ Post Graduate

Civil Status:
__ Single
__ Married
__ Separated
__ Widow/Widower
__ Live-in

Ethnic group:
__ Bicolano
__ Cebuano-Bisaya
__ Ilocano
__ Ilonggo
__ Tagalog
__ Waray
__ Badjao
__ B'laan
__ Maguindanaoan
__ Maranao
__ Tausug
__ T'boli
__ Others, specify _____

How many years has your spouse lived in General Santos City? ___ years

For respondent only

1. How many persons live in your household? ___
2. Who among members of your household work with you in fishing operations? Identify member no. 2, in relation to respondent (no. 1). (e.g. spouse, son, grandmother, etc.), age, check column for sex.

Household Members	Age	Sex	
		Male	Female
1. Respondent			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

9.			
10.			
11.			
12.			

3. What is your household's most important/primary source of income? (One answer only)
   __ Fishing
   __ Fish processing
   __ Fish trading/selling
   __ Farming
   __ Profession
   __ Remittance
   __ Others, specify _____

4. What is your household's second most important source of income? (One answer only)
   __ Fishing
   __ Fish processing
   __ Fish trading/selling
   __ Farming
   __ Profession
   __ Remittance
   __ Others, specify _____
   __ None

5. Approximately how much do you earn per month from fishing? (One answer only)
   __ 0 to 2,000
   __ 2,001 to 5,000
   __ 5,001 to 10,000
   __ 10,001 to 15,000
   __ 15,001 to 20,000
   __ 20,001 to 25,000
   __ 25,001 to 30,000
   __ 30,001 to 50,000
   __ 50,001 to 100,000
   __ above 100,000

6. Approximately how much is your total household income per month from all sources? (one answer only)
   __ 0 to 2,000
   __ 2,001 to 5,000
   __ 5,001 to 10,000
   __ 10,001 to 15,000
   __ 15,001 to 20,000
   __ 20,001 to 25,000
   __ 25,001 to 30,000
   __ 30,001 to 50,000
   __ 50,001 to 100,000
   __ above 100,000

7. Are you a member of any fishing-related organization?
   __ Yes
   __ No

   If no, proceed to Question No. 9

8. If yes, what fishing-related organization(s) are you a member of and what is your position? (Multiple response allowed)

Organization	Positions

	President/ Vice President	Secretary/ Treasurer	Other Officer Position	Member	None
a) tuna industry associations					
b) processors industry associations					
c) fisherfolk association					
d) women fisherfolks organization					
e) Others, please specify:					

9. What other groups in your community are you a member of (non-fishing)? Please specify:

_____

10. What is your position in the fishing operations?
__ Owner
__ Boat Captain /Operator of the fishing vessel
__ Owner-Operator
__ Officer
__ Crew/Worker/Pasahero

11. What is the size of your fishing vessel (main fishing vessel)?
___ <3 GT
___ 3-20 GT
___ 21-150 GT
___ >150 GT

12. How many days does the fishing boat spend at sea?
___ 1 day or less
___ 2-3 days
___ 4-7 days
___2-3 weeks
___ 1-2 months
___ > 3 months

13. Is fishing boat/vessel registered with LGU/BFAR?

___Yes __ No __ Don't know

If yes, in whose name is it registered?
_____ Male _____ Female _____ Corporation

If Corporation, is the president of corporation male or female?
_____ Male_____ Female

14. How was the fishing boat obtained? (Multiple answers allowed)
__ Self-financed
__ Borrowed money from relatives/family/friends
__ Loan (specify lender e.g. bank, private individual) _____
__ Buyer
__ By inheritance
__ Government Assistance
__ Non-government agencies
__ Others, please specify _____

15. How did you/fishing operator obtain your fishing gears? (Multiple answers allowed)
__ Self-financed
__ Borrowed money from relatives/family/friends
__ Loan (specify lender e.g. bank, private individual) _____
__ Buyer
__ By inheritance
__ Government Assistance
__ Non-government agencies
__ Others, please specify _____

16. How does the owner raise cash when needed for the fishing operations?
__ Self-financing, proceed to Question No. 18
__ Borrow money from relatives/family/friends
__ Loan (specify lender, e.g. bank, private individual) _____
__ Buyer
__ Others, please specify _____
__ Don't know

17. When the owner borrows money to support the fishing business operations, who does the borrowing? What is the sex of the borrower?

Position of responsible person	Sex	
	Male	Female
a) Fisher/Operator		
b) Spouse		
c) Business Partner		
d) Relative		
e) Others, please specify: _____		

18. How does the owner recruit workers for the fishing business? (Multiple answers allowed)
__ Personal Choice
__ Referrals
__ Advertisement
__ Internet
__ Others, please specify _____

19. How fast can the owner recruit workers? (one answer only)
__ Within a day
__ Within a week
__ Within a month
__ More than a month

20. How many workers do you have in one fishing operation (indicate number)? What is their employment status?

		Indicate Number	Employment Status (check box)	
			Regular	Seasonal
Men	18 yrs & above			
Young Men	15 yrs to below 18 yrs			
Women	18 yrs & above			
Young Women	15 yrs to below 18 yrs			
Boys	below 15 yrs.			
Girls	below 15 yrs.			
Total number of workers in one fishing operation				

21. From whom do you get reliable information on new fishing practices? (Multiple answers allowed)
___ Government agencies
___ Local Government Unit
___ Other fishers
___ Tuna industry association
___ Radio
___ TV
___Internet
___ Others, please specify._____

22. From whom do you get reliable information on market prices? (Multiple answers allowed)
___ Government agencies
___ Local Government Unit
___ Other fishers
___ Tuna industry association
___ Radio
___ TV
___ Internet
___ Others, please specify. _____

23. Who is your primary/major buyer? Please say if they are male or female. (Choose one only)

Type of buyer	Sex	
	Male	Female
a) Wholesaler		
b) Retailer		
c) Wholesaler-Retailer		
d) Processor		
e) Consumer		
f) Financier		
g) Others, please specify _____		

24. What percentage of the buyers you deal with are women? (indicate percentage)
_____ %

25. Who usually bring your tuna catch to the buyer? (multiple answers allowed)

		Check box
Men	18 yrs & above	
Young Men	15 yrs to below 18 yrs	
Women	18 yrs & above	
Young Women	15 yrs to below 18 yrs	
Boys	below 15 yrs.	
Girls	below 15 yrs.	

26. How do you get your product to your buyer? (multiple answers allowed)
___ Transport to retail market
___ Transport to wholesale market (fishing port)
___ Buyers get the fish at landing site
___ Others, please specify _____

27. Do you allow your buyers to get your fish on credit?
__ Yes __ No

If no, why not?
__ I need the cash for fishing operations
__ I need the cash for everyday expenses
__ Avoid risks of non-payment
__ Difficulty of collecting debts
__ Others, please specify _____

If yes, what percentage of those you allow credit to, are women?
_____%

PRACTICES & PARTICIPATION

28. In your fishing operation, who usually performs the following?

Activities	Men	Women	Young Men	Young Women	Boys	Girls
a)Process registration and legal documents						
b)Hiring of crew						
c)Plan the trip						
d)Prepare the boat and equipment						
e)Procure diesel						
f) Buy the baits						
g)Prepare food and water for the crew						
h)Prepare the nets and accessories						
i) Operate the boat engine						
j) Search for fish or fish school						
k)Set the net or gear						
l) Dive						
m) Haul the net						
n)Bleeding the tuna						
o)Beheading the fish						
p)Sort the catch						
q)Storage in ice						

r) Unload the catch								
s) Weigh the catch								
t) Grade the catch								
u)Inspecting								
v)Labelling								
w) Negotiate with the buyer								
x)Transport to the buyer								
y)Receive payment								
z) Recording of catch								
aa) Recordkeeping of finances								
bb) Payment of salaries and bills								
cc) Mend the net or gear								

29. Does a fish observer join the fishing operation (at sea)?
___ Yes
___ No

If no, proceed to Question No. 32.

30. If yes, how many observers join the operation?

	Number
Men	
Women	

31. Who pays the fish observers?
___ My company
___ Others, please specify_____
___ I don't know

32. Do BFAR enumerators/personnel board your boat and document catch (in landing sites)?
___ Yes
___ No

If no, proceed to Question No. 34.

33. If yes, how many enumerators board your boat (in landing sites)?

	Number
Men	
Women	

34. Do you attend the following activities?
___ Yes___ No

If no, proceed to Question No. 35.

If yes, who usually attend the following activities?

Activities	Men	Women	Young Men	Young Women	Boys	Girls
a) Meeting (People's Organization, LGUs, NGAs)						
b) Seminars/ Training related to fishing						
c) Community meetings						
d) Public hearings related to fishing						

KNOWLEDGE, BELIEFS & PERCEPTIONS

35. Based on your experiences, to what extent do you agree or disagree to the following statements?
(NOTE: enumerator has to read each sentence and ask respondents whether they agree or disagree, or they have no position on the matter.)

Statement	Agree	Neither Agree nor Disagree	Disagree
a) Men buyers offer better prices than women.			
b) Women buyers are easier to deal with than men buyers			
c) Women buyers are more particular about quality of fish than men buyers			
d) Men buyers pay more promptly than women buyers.			
e) It is easier to collect payment from women buyers than men buyers			
f) Women are encouraged to join fishing trip.			
g) Pregnant women on board bring bad luck			
h) Women who have their monthly period bring good luck to fishing trip			

36. I will read out statements and for each please say whether they are true or false: *(NOTE: enumerator to read each sentence and ask respondents if they believe each statement is TRUE or FALSE)*

	True	False
Tuna is a migratory fish		
Commercial fishers are not allowed to fish within 15km municipal water		
The legal size for purse seine nets to catch tuna is 3cm.		
The city government requires the registration of purse seine		
Skipjack is a kind of tuna		
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.		
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.		
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish.		

LEGAL RIGHTS & STATUS

37. Are you aware of fisheries-related policies/laws?

(NOTE: Interviewer must have working knowledge of each of the listed laws.)

___ Yes_____ No

If yes, what are these laws/policies that you are aware of? (*NOTE: Respondent has to spontaneously provide response and interviewer merely ticks off the law mentioned).*

If no, proceed to Question No. 38.

	Check if respondent mentions the law
a) The Philippine Fisheries Code of 1998	
b) Revised Fisheries Code of 2014	
c) The Handline Fishing Law of 2007	
d) Local Government Code of 1991	
e) Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean	
f) Other answers	

38. Please answer YES or NO in response to the following about the company you

	Yes	No	N/A
a) Are you currently covered by SSS?			
b) Are you covered by Philhealth			
c) Are there employees younger than 15 years old in the company?			
d) Do you have leave benefits?			
e) Are you entitled to paternity/maternity leave?			
f) Are you covered by accident insurance?			
g) Are you required to wear company ID?			
h) Are you paid the minimum wage?			
i) Does your company provide you with protective clothing to do your work?			
j) Does your company provide you protective eyewear			
k) Do you use hand gloves in handling tuna			
l) Is your working area well ventilated?			
m) Is your work area well lighted?			
n) Does your fishing boat have safe sleeping quarters for women?			
o) Does your fishing boat have separate comfort room for women?			

work in

39. For the same kind of work, how does your pay compare to that of your male/female counterpart? Please choose one among the three statements that I will read to you, as the one that best represents your belief.

Choices	Answer
Men are paid more than women	
Men and Women are paid the same	
Men are paid less than the women	

POWER & DECISION-MAKING

40. Who makes the decisions within your household about the following? *(NOTE: enumerator to read each decision area and asks respondent to choose the person who <u>has the final say</u> on the issue. However, if respondent insists that it is a joint decision between two persons, then check both decision makers)*

Area of Decision Making	Father	Mother	Daughter	Son	Other Male Household member	Other Female Household Member
a) Education						
b) Food preparation/ purchases						
c) Budgeting						
d) Leisure activities						
e) Health						
f) Discipline						
g) Community involvement						

41. Who makes the decisions with regard to fishing operations? (*NOTE: enumerator to read each decision area and asks respondent to choose the person who has the final say on the issue. However, if respondent insists that it is a joint decision between two persons, then check both decision makers)*

Area of Decision	Respondent	Spouse	Male coworker	Female coworker	N/A
Purchase of fishing gears/ paraphernalia					
Fishing area					
Financing the fishing operation					
Marketing of catch					
Pricing					
Timing of fishing operation					
Hiring of workers					

42. Are there any fisheries related-projects/activities in your community?

__ Yes __ No

43. If yes, to what extent are you involved in these fisheries related-projects/activities in your community?

Community Activities	Never	Some-times	Often	Always	N/A
Meetings					
Training					
Public hearing					
Socials					
Researches					
Committee membership					
Association membership					
Bantay dagat					
Coastal resource management					

TIME & SPACE

For Time:
What is a typical day for you starting from rising in the morning until retiring for sleep, as you engage in both work and household activities? (Ask who does reproductive roles that are not mentioned).
For Space:
Where do you perform the economic tasks (e.g., processing, selling, trading) you mentioned? For example: (Is it safe to assume that reproductive tasks are home based)

Time	Activities	Where done: home, work area, community
4:00AM to 5:00AM		
5:00AM to 6:00AM		
6:00AMto 7:00AM		
7:00AM to 8:00AM		
8:00AM to 9:00AM		
9:00AM to 10:00AM		
10:00AM to 11:00AM		
11:00AM to 12:00NN		
12:00NN to 1:00PM		
1:00PM to 2:00PM		
2:00PM to 3:00PM		
3:00PM to 4:00PM		
4:00PM to 5:00PM		
5:00PM to 6:00PM		
6:00PM to 7:00PM		
7:00PM to 8:00PM		
8:00PM to 9:00PM		
9:000PM to 10:00PM		
10:00PM to 11:00PM		
11:00PM to 12:00MN		
12:00MN to 1:00AM		
1:00AM to 2:00AM		
2:00AM to 3:00AM		
3:00AM to 4:00AM		

Aside from the tasks mentioned above, what other tasks do you perform? May be not on a daily basis but are being performed once/twice/thrice in a week?

Processors

SURVEY QUESTIONNAIRE
Set B: PROCESSORS

Screening Question	1) Does the enterprise/company you are connected with process tuna? __ Yes___ No If answer is YES, proceed to Question No. 2 If answer is NO, terminate interview and replace respondent 2) How would you rate your level of knowledge about the processing operations of your enterprise/company? A - Excellent B - Very Good C - Good D -Fair E - Poor If answer is A, B, C proceed with the interview If answer is E, Terminate interview and replace respondent
Socio-demographics	***For respondent*** What is your name: Address (in General Santos City): Address (outside General Santos City): How many years have you lived in General Santos City? ___ years Sex: __ Male __ Female Highest educational attainment: __ No formal schooling __ Some grade school __ Grade school graduate __ Some high school __ High school graduate __ Some college __ Vocational schooling __ College graduate __ Post Graduate Civil Status: __ Single __ Married __ Separated __ Widow/Widower __ Live-in Ethnic group: __ Bicolano __ Cebuano-Bisaya __ Ilocano __ Ilonggo __ Tagalog __ Waray __ Badjao

__ B'laan
__ Maguindanaoan
__ Maranao
__ Tausug
__ T'boli
__ Others, specify _____

About spouse/partner of respondent, if applicable:

Sex: __ Male
__ Female

Highest educational attainment:
__ No formal schooling
__ Some grade school
__ Grade school graduate
__ Some high school
__ High school graduate
__ Some college
__ Vocational schooling
__ College graduate
__ Post Graduate

Civil Status:
__ Single
__ Married
__ Separated
__ Widow/Widower
__ Live-in

Ethnic group:
__ Bicolano
__ Cebuano-Bisaya
__ Ilocano
__ Ilonggo
__ Tagalog
__ Waray
__ Badjao
__ B'laan
__ Maguindanaoan
__ Maranao
__ Tausug
__ T'boli
__ Others, specify _____

How many years has your spouse lived in General Santos City? ___ years

For respondent only

1. How many persons live in your household? ___

2. Who among members of your household work with you in tuna processing facility? Identify member no. 2, in relation to respondent (no. 1). (e.g. spouse, son, grandmother, etc.), age, check column for sex.

Household Members	Age	Sex	
		Male	Female
1.RESPONDENT			
2.			
3.			
4.			
5.			
6.			

7.			
8.			
9.			
10.			
11.			
12.			

3. What is your household's most important/primary source of income? (One answer only)

__ Fishing
__ Fish processing
__ Fish trading/selling
__ Farming
__ Profession
__ Remittance
__ Others, specify _____

4. What is your household's second most important source of income? (One answer only)

__ Fishing
__ Fish processing
__ Fish trading/selling
__ Farming
__ Profession
__ Remittance
__ Others, specify _____
__ None

5. Approximately how much do you earn per month from tuna processing? (One answer only)
__ 0 to 2,000
__ 2,001 to 5,000
__ 5,001 to 10,000
__ 10,001 to 15,000
__ 15,001 to 20,000
__ 20,001 to 25,000
__ 25,001 to 30,000
__ 30,001 to 50,000
__ 50,001 to 100,000
__ above 100,000

6. Approximately how much is your total household income per month from all sources? (one answer only)

__ 0 to 2,000
__ 2,001 to 5,000
__ 5,001 to 10,000
__ 10,001 to 15,000
__ 15,001 to 20,000
__ 20,001 to 25,000
__ 25,001 to 30,000
__ 30,001 to 50,000
__ 50,001 to 100,000
__ above 100,000

7. Are you a member of any fishing-related organization?
__ Yes
__ No

If no, proceed to Question No. 9

8. If yes, what fishing-related organization(s) are you a member of and what is your position? (Multiple response allowed)

Organization	Positions				
	President/ Vice President	Secretary/Treasurer	Other Officer Position	Member	None
a) tuna industry associations					
a) processors industry associations					
b) fisherfolk association					
c) women fisherfolks organization					
d) Others, please specify:					

9. What other groups in your community are you a member of? Please specify:
_____

10. What is your position in the processing facility?
__ Owner of the processing facility.
__ Part of the management team
__ Worker

If answer is owner or part of management team, what is your position in the organization(s)?

__ President/Vice-President
__ Secretary/Treasurer
__ Board Member
__ Department/Division Head
__ others, please specify

If answer is worker, what are your specific tasks? (please specify)
_____

11. Is there a labor union in your company?
__ Yes ___ No

If yes, how many are men and women officers? (indicate number)

__ women officer
__ men officers

12. What is the scale of operations of your processing facility?
__ House/kitchen type
__ Small-scale (within General Santos Fish Port complex)
__ Small-scale (outside General Santos Fish Port complex)
__ Large-scale (within General Santos Fish Port complex)
__ Large-scale (outside General Santos Fish Port complex)
__ Others, please specify _____

13. What is the floor area of the processing facility? ____

14. Product forms processed (Multiple answers)
__ Canned/bottled/pouched
__ Chilled
__ Frozen
__ Dried
__ Smoked
__ Fillet

__ Sashimi/sushi
__ Cooked Ready-to-eat
__ Others, please specify_____

15. Is your processing facility HACCP compliant?
__Yes__ No__ Don't know

16. Is your processing facility registered with Food and Drug Administration (FDA)?
__ Yes __ No__ Don't Know

17. Is your processing enterprise registered with DTI/ SEC and LGU?
__Yes __ No__ Don't know

If yes, in whose name is it registered?
_____ Male _____ Female _____ Corporation

If Corporation, is the president of Corporation male or female?
_____ Male _____ Female

18. How did the owner raise the capital to establish the processing facility?
__ Self-financed
__ Borrowed from relatives/family/friends
__ Loan (specify lender e.g. bank, private individual) _____
__ Buyer
__ Financial support from the government
__ Others, please specify _____
__ Don't Know

19. How does the company raise cash when needed for the operations of the processing plant?
__ Self-financing, proceed to Q21
__ Borrow money from relatives/family/friends
__ Loan (specify lender, e.g. bank, private individual _____
__ Secure loan, Specify from whom _____
__ Buyer
__ Others, please specify _____

20. When the company borrows money to support the processing operation, who does the borrowing?

Position of responsible person	Sex	
	Male	Female
Owner		
Executives		
Spouse of owner		
Finance/Budget Officer		
Marketer		
Others, please specify: _____		

21. How does the company find workers for the processing operation?
__ Personal Choice
__ Referrals
__ Advertisement
__ Job fair
__ Online application (e.g. LinkedIn, Jobstreet)

22. Do family members take part in your processing operations?
__ Yes___ No

If yes, who are they? How many? Are they paid? What type of work?

Family Member	Number	Age	Paid?		Type of work?	
			Yes	No	Supervisory	Labor
__ Spouse						
__ Son						
__ Daughter						
__ Father						
__ Mother						
__ Niece						
__ Nephew						
__ Grandfather						
__ Grandmother						
__ daughter In-law						
__ son-in-law						

23. How fast could the company find workers?
__ Within a day
__ Within a week
__ Within a month
__ More than a month

24. How many employees/workers does the company have (indicate number)?

Men _____ 15 & above Women ___ 15 & above
Boys _____ below 15 Girls ___ below 15

	Regular		Seasonal		N/A
	Supervisory	Worker	Supervisory	Worker	
Men					
Boys					
Women					
Girls					

25. From whom does the company get reliable information on new processing technology/ practices?

___ Government agencies
___ Local Government Unit
___ Other processors
___ Tuna industry association
___Local trade fairs/ food shows
___ International trade fairs/food shows
___ Radio
___ TV
___Internet
___ Others, please specify_____

26. From whom does the company get reliable information about buyers?
___ Government agencies
___ Local Government Unit
___ Other traders

___ Tuna industry association
___ Local trade fairs/ food shows
___ International trade fairs/food shows
___ Radio
___ TV
___Internet
___ Others, please specify:_____

27. From whom does the company get reliable information on market prices?
___ Government agencies
___ Local Government Unit
___ Other processors
___ Tuna industry association
___ Radio
___ TV
___ Internet
___ Others, please specify:_____

28. Who is your **primary** buyer? Please indicate if they are male or female. Do they provide the financing? (Choose one only)

Type of buyer	Sex		Buyers provide financing?	
	Male	Female	Yes	No
Local Restaurants				
Other Local institutional buyers				
Exporters				
Buying offices of exporters				
Retailers/Supermarkets				
Small-scale market vendors				
Processors				
Households				
Pasalubong centers				
Others, specify _____				

29. What percentage of the buyers you deal with are women? (indicate percentage)

____ %

30. Who usually delivers processed tuna to the buyer? (Choose only one)
__ Men __ Women
__ Boys__ Girls

31. Do you allow your buyers to get your processed products on credit?
__ Yes __ No

If No, why not?
__ I/owner needs cash for processing operations
__ I/owner needs cash for everyday expenses
__ Avoid risks of non-payment
__ Difficulty of collecting debts
__ Others, please specify _____

If Yes, what percentage of those that you allow credit to, are women?
____%

32. Are there differences in the purchase behavior between men and women buyers?
__ Yes __ No

If Yes, please indicate for each behavior stated below refers to women, men or the same.

Behaviors	Women	Men	The same
Who is more strict with product quality			
Who is easier to negotiate with			
Who is more knowledgeable about product			
Who is more serious in complying with agreed sales conditions ((e.g. delivery schedule, packaging and labeling requirements, quality standards, etc.)			
Who is more firm with their decisions			

PRACTICES & PARTICIPATION

33. In your processing operation, who usually performs the following?

Activity	Men	Women	Boys	Girls	N/A
Process registration and legal documents					
Hiring of workers					
Plan the production schedule					
Prepare the equipment and facilities					
Purchase raw materials					
Purchase packaging materials					
Cleaning of raw materials					
Remove the guts and gills					
Beheading					
Bleeding					
Operate equipment					
Quality assurance					
Quality Control					
Occupational safety					
Cutting/slicing					
Cooking					
Freezing					
Bottling					
Canning					
Pouching					
Labeling					
Pack in cartoon					
Label					
Storage					
Clean and maintain of the physical facilities					
Maintenance of equipment, machines, infrastructure					
Negotiate with the buyer					
Transport to the buyer					
Receive payment					
Record of sales					
Record of financial transactions					
Record production					
Inventory of stocks					
Payment of salaries and bills					

34. In your processing operations, who usually attend the following?

	Men	Women	Boys	Girls
Meeting (People's Organization, LGUs, NGAs)				
Seminars/ Training related to processing				
Industry meetings				
Public hearings				

KNOWLEDGE, BELIEFS & PERCEPTIONS

35. Based on your experience, please say to what extent you agree/disagree with the following statements related to fish processing. *(NOTE: enumerator has to read each sentence and ask respondents whether they agree or disagree. In case respondent really cannot decide whether agree/disagree, enumerator can check 'have no position on the matter'.)*

Statements	Agree	Neither Agree nor Disagree	Disagree
Women are more skillful in processing than men			
Women are easier to deal with than men in the workplace.			
Men are more particular about quality of processed tuna than women.			
Women are more efficient in processing than men.			
In selling processed tuna, it is easier to collect payment from women buyers than men			

36. I will read out statements and for each please say whether they are true or false:

	True	False
Hot-Smoked tuna is carcinogenic		
The Food Drug Administration requires processing plant to be registered		
Application of Philippine National Standard for processed tuna is mandatory		
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.		
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.		
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish		

LEGAL RIGHTS & STATUS

37. Are you aware of any fisheries processing-related policies/laws?
(NOTE: Interviewer must have working knowledge of each of the listed laws.)
___ Yes____ No

If yes, what are these laws that you are aware of? NOTE: Extract answer from respondents and classify answer under laws listed. Do not show list of laws to respondent.
__ Yes ____No

If yes, what are these standards/laws that you are aware of? (*NOTE: Interviewer checks the law only when mentioned by respondent)*

If no, proceed to Question No. 38

	Check if respondent mentions the law
HACCP	
Philippine National Standard on Tuna Products	
Good Manufacturing Practices (GMP)	
Labeling requirements	

38. How many hours per day do you work in the plant during peak season?
_____ hours

39. How many hours per day do you work in the plant during non-peak season?
____ hours

40. How many % of the male and female workers in your plant are contractual/ regular?

	Peak Season		Off Season	
Employment status/ Sex	Male	Female	Male	Female
Regular				
Contractual				

41. The following questions ask about the processing plant you work in:

	Yes	No
Does it provide SSS coverage?		
Does it provide Philhealth		
Are there employees younger than 18 years old in the plant?		
Are you entitled to leave benefits?		
Are you entitled to paternity/maternity leave?		
Does the company provide accident insurance?		
Are you required to wear company ID?		
Are you paid the minimum wage?		
Does your company provide you with protective clothing to do your work?		
Does your company provide you protective eyewear		
Do you use hand gloves in handling tuna		
Is your working area well ventilated?		
Is your work area well lighted?		
dequate toilet facilities		
dequate nursing facilities		

42. For the same kind of work, how does your pay compare to your male/female counterpart? Please choose one among the three statements that I will read to you, as the one that best represents your belief.

Choices	Answer (one answer only)
Men are paid more than women	
Men and Women are paid the same	
Men are paid less than the women	

POWER & DECISION-MAKING

43. Who makes the decisions within your household about the following*? (NOTE: enumerator to read each decision area and asks respondent to choose the person who has*

the final say on the issue. However, if respondent insists that it is a joint decision between two persons, then check both decision makers)

Area of Decision Making	Father	Mother	Daughter	Son	Other Male Household member	Other Female Household Member
a) Education						
b) Food preparation/ purchases						
c) Budgeting						
d) Leisure activities						
e) Health						
f) Discipline						
g) Community involvement						

44. Who makes the decisions with regard to processing operations? *(NOTE: enumerator to read each decision area and asks respondent to choose the person who has the final say on the issue. However, if respondent insists that it is a joint decision between two persons, then check both decision makers)*

Area of Decision	Owner	Spouse of Owner	Male Manager/ supervisor	Female Manager/ supervisor	Male staff	Female staff
Supplier of fresh tuna						
Supplier of non-fish raw materials						
Financing the processing operations						
Buyer of processed tuna						
Production schedule						
Production volume						
Hiring of workers						
Pricing of products						
Training						

45. Are there any fisheries related-projects/activities in your community?

__ Yes __ No

If Yes, proceed to Question 45
If No, proceed to Time &Space questions

46. If yes, to what extent are you involved in these fisheries related-projects/activities?

Community Activities	Never	Sometimes	Often	Always	N/A
Meetings					
Training					
Public hearing					

Socials						
Researches						
Committee membership						
Association membership						
Bantay dagat						
Coastal resource management						
Others, please specify						

TIME & SPACE
(how men and women spend their time and what implications their time commitments have on their availability for program activities)

For Time:
What is a typical day for you starting from rising in the morning until retiring for sleep, as you engage in both work and household activities. (Ask who does reproductive roles that are not mentioned).

For Space:
Where do you perform the economic tasks (e.g., processing, selling, trading) you mentioned? For example: (Is it safe to assume that reproductive tasks are home based)

Time	Activities	Where done: home, work area, community
4:00AM to 5:00AM		
5:00AM to 6:00AM		
6:00AMto 7:00AM		
7:00AM to 8:00AM		
8:00AM to 9:00AM		
9:00AM to 10:00AM		
10:00AM to 11:00AM		
11:00AM to 12:00NN		
12:00NN to 1:00PM		
1:00PM to 2:00PM		
2:00PM to 3:00PM		
3:00PM to 4:00PM		
4:00PM to 5:00PM		
5:00PM to 6:00PM		
6:00PM to 7:00PM		
7:00PM to 8:00PM		
8:00PM to 9:00PM		
9:000PM to 10:00PM		
10:00PM to 11:00PM		
11:00PM to 12:00MN		
12:00MN to 1:00AM		
1:00AM to 2:00AM		
2:00AM to 3:00AM		
3:00AM to 4:00AM		

Aside from the tasks mentioned above, what other tasks do you perform? May be not on a daily basis but are being performed once/twice/thrice in a week?

Traders and Exporters

SURVEY QUESTIONNAIRE
Set C: TRADERS AND EXPORTERS

Screening Question	1) Is your enterprise/company involved in buying and selling (trading) tuna either in the local or export markets? __ Yes___ No If answer is YES, proceed to Question 2 If answer is NO, terminate interview and replace respondent 2) How would you rate your level of knowledge about the trading operations of your enterprise/company? A - Excellent B - Very Good C - Good D -Fair E -Poor If answer is A, B, C proceed with the interview If answer is E, terminate interview and replace respondent
Socio-demographics	***For respondent*** What is your name: Address (in General Santos City): Address (outside General Santos City): How many years have you lived in General Santos City? ___ years Sex: __ Male __ Female Highest educational attainment: __ No formal schooling __ Some grade school __ Grade school graduate __ Some high school __ High school graduate __ Somecollege __ Vocational schooling __ College graduate __ Post Graduate Civil Status: __ Single __ Married __ Separated __ Widow/Widower __ Live-in Ethnic group: __ Bicolano __ Cebuano-Bisaya __ Ilocano __ Ilonggo __ Tagalog __ Waray __ Badjao

__ B'laan
__ Maguindanaoan
__ Maranao
__ Tausug
__ T'boli
__ Others, specify _____

About spouse/partner of respondent, if applicable:

Sex: __ Male
__ Female

Highest educational attainment:
__ No formal schooling
__ Some grade school
__ Grade school graduate
__ Some high school
__ High school graduate
__ Some college
__ Vocational schooling
__ College graduate
__ Post Graduate

Civil Status:
__ Single
__ Married
__ Separated
__ Widow/Widower
__ Live-in

Ethnic group:
__ Bicolano
__ Cebuano-Bisaya
__ Ilocano
__ Ilonggo
__ Tagalog
__ Waray
__ Badjao
__ B'laan
__ Maguindanaoan
__ Maranao
__ Tausug
__ T'boli
__ Others, specify _____

How many years has your spouse lived in General Santos City? ___ years

For respondent only

1. How many persons live in your household? ___

2. Who among members of your family work with you in fish trading? Identify member no. 2, in relation to respondent (no. 1). (e.g. spouse, son, grandmother, etc), age, check column for sex.

Household Members	Age	Sex	
		Male	Female
1. Respondent			
2.			
3.			
4.			
5.			
6.			
7.			

8.			
9.			
10.			
11.			
12.			

3. What is your household's most important/primary source of income? (One answer only)
   __ Fishing
   __ Fish processing
   __ Fish trading/selling
   __ Farming
   __ Profession
   __ Remittance
   __ Others, specify _____

4. What is your household's second most important source of income? (One answer only)
   __ Fishing
   __ Fish processing
   __ Fish trading/selling
   __ Farming
   __ Profession
   __ Remittance
   __ Others, specify _____
   __ None

5. Approximately how much do you earn per month from fish trading/selling (One answer only)
   __ 0 to 2,000
   __ 2,001 to 5,000
   __ 5,001 to 10,000
   __ 10,001 to 15,000
   __ 15,001 to 20,000
   __ 20,001 to 25,000
   __ 25,001 to 30,000
   __ 30,001 to 50,000
   __ 50,001 t0 100,000
   __ above 100,000

6. Approximately how much is your total household income per month from all sources? (one answer only)
   __ 0 to 2,000
   __ 2,001 to 5,000
   __ 5,001 to 10,000
   __ 10,001 to 15,000
   __ 15,001 to 20,000
   __ 20,001 to 25,000
   __ 25,001 to 30,000
   __ 30,001 to 50,000
   __ 50,001 t0 100,000
   __ above 100,000

7. Are you a member of any fishing-related organization?
   __ Yes __No

   If no, proceed to Question No. 9

8. If yes, what fishing-related organization(s) are you a member of and what is your position? (Multiple response allowed)

Organization	Positions				
	President/Vice President	Secretary/Treasurer	Other Officer Position	Member	None
a) tuna industry associations					
b) processors industry associations					
c) fisherfolk association					
d) women fisherfolks organization					
e) Others, please specify:					

9. What other groups in your community are you a member of (not fishing-related)? Please specify:

   _____

10. Type of trading facility you are employed in (Multiple response)
    - __ wholesaler
    - __ retailer
    - __ wholesaler-retailer
    - __ broker/agent
    - __ buying office of exporters

11. Area of coverage
    - __ within the barangay
    - __ within the province
    - __ within the region
    - __ nationwide
    - __ global/international

12. Type of operation
    - __ trading only
    - __ trading and minor processing
    - __ trading and major processing

13. Forms of tuna products traded (Multiple answers)
    - __ fresh tuna
    - __ Canned
    - __ Chilled
    - __ Frozen
    - __ Dried
    - __ Smoked
    - __ Fillet
    - __ Sashimi
    - __ Cooked ready-to-eat
    - __ Others, please specify_____

14. What is your position in the trading enterprise/company?

    - __ Owner of the processing facility.
    - __ Part of the management team
    - __ Worker

    If answer is owner or part of management team, what is your position in the organization(s)?

    - __ President/Vice-President
    - __ Secretary/Treasurer
    - __ Board Member
    - __ Department/Division Head
    - __ Others, please specify

    If answer is worker, what are your specific tasks? (please specify)

	_____ 15. Is there a labor union in your company? __ Yes ___ No If yes, how many are men and women officers? (indicate number) _____ women officer _____ men officers
ACCESS	16. What is the scale of operations of your trading facility? __ Small-scale (within General Santos Fish Port complex) __ Small-scale (outside General Santos Fish Port complex) __ Large-scale (within General Santos Fish Port complex) __ Large-scale (outside General Santos Fish Port complex) __ Others, please specify _____
	17. Do you have a storage facility? ___ Yes___ No If yes, what is the ownership of the storage facility? ___ trader owns the facility ___ trader rents the storage facility ___ Others, please specify _____
	18. How did you (the owner) raise the capital to establish the trading facility? __ Self-financed __ Borrowed from relatives/family/friends __ Loan (specify lender e.g. bank, private individual) _____ __ Buyer __ Financial support from the government __ Others, please specify _____
	19. How does the company raise cash when needed for working capital of trading operations? __ Self-financing, proceed to Q21 __ Borrow from relatives/family/friends __ Secure loan, Specify if bank or private individual _____ __ Buyer __ Others, please specify _____
	20. When the company borrows money to support the trading operation, who does the borrowing, and is borrower male or female?

Position of responsible person	Sex	
	Male	Female
Owner		
Executives		
Spouse of owner		
Finance/Budget Officer		
Marketer		
Others, please specify:_____		

21. How does the company find workers for the trading operations?
__ Personal Choice
__ Referrals
__ Advertisement
__ Job fair
__ On line application (e.g. LinkedIn, Jobstreet)
__ Others, please specify _____

22. Do family members take part in your trading operations?
__ Yes___ No

If yes, who are they? How many? Are they paid? What type of work?

Family Member	Number	Age	Paid?		Type of work?	
			Yes	No	Supervisory	Labor
__ Spouse						
__ Son						
__ Daughter						
__ Father						
__ Mother						
__ Niece						
__ Nephew						
__ Grandfather						
__ Grandmother						
__ daughter In-law						
__ son-in-law						

23. How fast could the company find workers?
__ Within a day
__ Within a week
__ Within a month
__ More than a month

24. How many employees/workers does the company have and what is their employment status? (indicate number)?
_____ Men 15 & above
_____ Women 15 & above
_____ Boys, below 15
_____Girls below 15

	Regular		Seasonal		N/A
	Supervisory	Worker	Supervisory	Worker	
Men					
Boys					
Women					
Girls					

25. From whom/where does the company get reliable information on new trading technology/ practices? (multiple response allowed)
___ Government agencies
___ Local Government Unit
___ Other processors
___ Tuna industry association
___Local trade fairs/ food shows
___ International trade fairs/food shows

___ Radio
___ TV
___Internet
___ Others, please specify_____

26. From whom does the company get reliable information about buyers?(multiple response allowed)
___ Government agencies
___ Local Government Unit
___ Other processors
___ Tuna industry association
___Local trade fairs/ food shows
___ International trade fairs/food shows
___ Radio
___ TV
___Internet
___ Others, please specify_____

27. From whom does the company get reliable information on market prices? (multiple response allowed)
___ Government agencies
___ Local Government Unit
___ Other processors
___ Tuna industry association
___Local trade fairs/ food shows
___ International trade fairs/food shows
___ Radio
___ TV
___Internet
___ Others, please specify_____

28. Who is your **primary** buyer? Please indicate if they are male or female and whether the buyer provides financing? (Choose one only)

Type of buyer	Sex		Buyers provide financing?	
	Male	Female	Yes	No
Local Restaurants				
Other Local institutional buyers				
Exporters				
Buying offices of exporters				
Other wholesalers				
Other wholesalers-retailers				
Retailers/Supermarkets				
Small-scale market vendors				
Processors				
Others, specify _____				

29. What percentage, of the buyers you deal with, are women? (indicate percentage)
_____ %

30. Who usually delivers processed tuna to the buyer? (Choose only one)
__ Men __ Women
__ Boys__ Girls

31. Do you allow your buyers to get your processed products on credit?
__ Yes __ No

If No, why not?
__ cash is needed for trading operations
__ cash is needed for everyday expenses
__ Avoid risks of non-payment
__ Difficulty of collecting debts
__ Others, please specify _____

If Yes, what percentage that you allow credit to are women?
____%

32. Are there differences in the purchase behavior between men and women buyers?
__ Yes __ No If no proceed to Question 33.

If Yes, in what way are women and men different?

Behaviors	Women	Men	Same
Who is more strict with product quality			
Who is easier to negotiate with			
Who is more knowledgeable about product			
Who is more serious in complying with agreed sales conditions ((e.g. delivery schedule, packaging and labeling requirements, quality standards, etc.)			
Who is more firm with their decisions			

33. Who is your **primary supplier of fresh tuna**? Please indicate if they are male or female. Do they allow you to get the fresh tuna on credit? (Choose one only)

Type of supplier	Sex		Buyers provide financing?	
	M	F	Yes	No
Small-scale municipal fishers				
small scale commercial				
Medium scale commercial				
Large scale commercial fishing operators				
Other traders of fresh tuna				
Others, specify _____				

34. Who is your **primary supplier of processed tuna**? Please indicate if they are male or female. Do they allow you to get the processed tuna on credit? Financing? (Choose one only)

Type of buyer	Sex		Buyers provide financing?	
	Male	Female	Yes	No
Small-scale municipal processors				
Large scale processors				
Other traders of processed tuna				
Others, specify _____				

35. What percentage of your fresh-tuna suppliers are men/women
Men____
Women____
Total100%

PRACTICES & PARTICIPATION

36. In your trading operation, who usually performs the following?

	Men	Women	Boys	Girls	N/A
Process registration and legal documents					
Hiring of workers					
Identify suppliers of fresh tuna					
Identify suppliers of processed tuna					
Identify buyers of fresh tuna					
Identify buyers of processed tuna					
Load and Unload products					
Weigh, sort and classify products					
Remove the guts and gills					
Operate equipment					
Ensure quality control					
Cook					
Blast freezing					
Pack					
Label					
Storage					
Clean and maintain of the physical facilities					
Look for supplier of tuna					
Negotiate with the buyer					
Transport to the buyer					
Receive payment					
Record of sales					
Record of financial transactions					
Record production					
Inventory of stocks					
Payment of salaries and bills					

37. In your trading organization, who usually attend the following activities?

	Men	women	Boys	Girls
Meeting (People's Organization, LGUs, NGAs)				
Seminars/ Training				
Industry meetings				
Public hearings				

KNOWLEDGE, BELIEFS & PERCEPTIONS

38. Based on your experience, please say to what extent you agree/disagree with the following statements related to fish processing. *(NOTE: enumerator has to read each sentence and ask respondents whether they agree or disagree. In case respondent really cannot decide whether agree/disagree, enumerator can check 'have no position on the matter'.)*

Statements	Agree	Neither Agree nor Disagree	Disagree
Women are more skillful in trading than men			
Women are easier to deal with than men in the trading business.			
Men are more particular about quality of tuna traded than women.			
Women are more efficient in trading than men.			
In selling processed tuna, it is easier to collect payment from women buyers than men			

39. I will read out statements and for each please say whether they are true or false:

	True	False
Smoked tuna is carcinogenic		
The Food Drug Administration requires processing plant to be registered		
Application of Philippine National Standard for processed tuna is mandatory		
Tuna is a migratory fish		
Commercial fishers are not allowed to fish within 15km municipal water		
The legal size for purse seine to catch tuna is 3cm		
The city government requires the registration of purse seine		
Skipjack is a kind of tuna		
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area.		
A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets.		
To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish		

LEGAL RIGHTS & STATUS

40. Are you aware of fisheries related policies/laws that affect trading operations?
____Yes___ No
If no, proceed to Question No. 41

If yes, what are these laws that you are aware of? (NOTE: Extract answer from respondents and classify answer under laws listed; enumerator is provided a list of pertinent laws/policies so they can classify answers. Do not show list of laws to respondent.)

	Check if respondent mentions the law
HACCP	
Philippine National Standard on Tuna Products	
Good Manufacturing Practices (GMP)	
Labeling requirements	

41. How many hours per day do you work in your trading operation during peak season?

____ hours

42. How many hours per day do you work in the trading operation during non-peak season?

____ hours

43. How many % of the male and female workers in the trading facility plant are contractual/ regular?

	Peak Season		Off Season	
Employment status/ Sex	Male	Female	Male	Female
Regular				
Contractual				

44. The following pertain to conditions under which you work as tuna trader:

	Yes	No
Are you covered by SSS?		
Are you covered by Philhealth?		
Are there employees younger than 15 years old who is employed in trading work?		
Are you entitled to leave benefits?		
Are you entitled to paternity/maternity leave?		
Does the company provide accident insurance?		
Are you required to wear company ID?		
Are you paid the minimum wage?		
Does your company provide you with protective clothing to do your work?		
Does your company provide you protective eyewear		
Do you used hand gloves in handling tuna		
Is your working area well ventilated?		
Is your work area well lighted?		

45. For the same kind of work, how does your pay compare to your male/female counterpart? *(NOTE: enumerator to read all three sentences and asks respondent to choose one sentence that best represents his/her belief.*

Choices	Answer (one answer only)
Men are paid more than women	
Men and Women are paid the same	
Men are paid less than the women	

POWER & DECISION-MAKING

46. Who makes the decisions within your household about the following*?(NOTE: enumerator to read each decision area and asks respondent to choose the person who has the final say on the issue.However, if respondent insists that it is a joint decision between two persons, then check both decision makers)*

Area of Decision Making	Father	Mother	Daughter	Son	Other Male Household member	Other Female Household Member
h) Education						
i) Food preparation/ purchases						
j) Budgeting						
k) Leisure activities						
l) Health						
m) Discipline						
n) Community involvement						

47. Who makes the decisions with regard to trading operations? *(NOTE: enumerator to read each decision area and asks respondent to choose the person who has the final say on the issue. However, if respondent insists that it is a joint decision between two persons, then check both decision makers)*

Area of Decision	Owner	Spouse of Owner	Male Manager/ supervisor	Female Manager/ supervisor	Male staff	Female staff
Supplier of fresh tuna						
Supplier of non-fish raw materials						
Financing the processing operations						
Buyer of processed tuna						
Production schedule						
Production volume						
Hiring of workers						
Pricing of products						
Training						

48. Are there any fisheries related-projects/activities in your community?

__ Yes __ No

If Yes, proceed to Question No. 49
If No, proceed to Time &Space questions

49. If yes, to what extent are you involved in these fisheries related-projects/activities?

Community Activities	Never	Sometimes	Often	Always	N/A
Meetings					
Training					
Public hearing					
Socials					
Researches					
Committee membership					
Association membership					
Bantay dagat					
Coastal resource management					
Others, please specify					

TIME & SPACE

For Time:
What is a typical day for you starting from rising in the morning until retiring for sleep, as you engage in both work and household activities. (Ask who does reproductive roles that are not mentioned).

For Space:
Where do you perform the economic tasks (e.g., processing, selling, trading) you mentioned? For example: (Is it safe to assume that reproductive tasks are home based)

Time	Activities	Where done: home, work area, community
4:00AM to 5:00AM		
5:00AM to 6:00AM		
6:00AMto 7:00AM		
7:00AM to 8:00AM		
8:00AM to 9:00AM		
9:00AM to 10:00AM		
10:00AM to 11:00AM		
11:00AM to 12:00NN		
12:00NN to 1:00PM		
1:00PM to 2:00PM		
2:00PM to 3:00PM		
3:00PM to 4:00PM		
4:00PM to 5:00PM		
5:00PM to 6:00PM		
6:00PM to 7:00PM		
7:00PM to 8:00PM		
8:00PM to 9:00PM		
9:000PM to 10:00PM		
10:00PM to 11:00PM		
11:00PM to 12:00MN		
12:00MN to 1:00AM		
1:00AM to 2:00AM		
2:00AM to 3:00AM		
3:00AM to 4:00AM		

	Aside from the tasks mentioned above, what other tasks do you perform? May be not on a daily basis but are being performed once/twice/thrice in a week?

ANNEX 3. FOCUS GROUP DISCUSSIONS AND INTERVIEW GUIDES

A. Focus Group Discussion

Wives of Fishers

Preliminaries	**Prayer (optional)** **Introduction of participants and facilitators** **Objectives of FGD:** 1) Probe on the roles and relations of men and women in the tuna value chain; 2) Determine the role of women in fisheries management; and 3) Identify strategies to enhance women's participation in fisheries management. **Informed Consent: voluntary participation, rule of confidentiality, permission to take photos and record conversation, etc.**
Access to assets (Survey results can be used to probe questions: this may be in resources/services where survey shows the least participation from women e.g., access to credit and training-	Resources and Services 1. Capital 2.Credit 3. Technology, fishing boat, gears 4. Labor 5. trainings 6. processing facilities 7. Market 8. Political representation 9. Information 10. land 11. Social networks 12. Employment 13. Benefits 1. Do you agree that women usually access credit for fishing enterprises? What happens if the men access credit? 2. If women wanted to participate in a training or workshop, whom can they approach? Why? (Probe/discuss). 3. If there was a training that women are invited to attend, where would you recommend that training or workshop be held? For how long (schedule that works for them)?

	4. What is the reaction of your husbands when you (wives) are asked to participate in projects/activities/training especially related to fishing? If not favorable, how do you think this can change? 5. When women are given an income-generating project in what way are your husbands involved in the project? (For example, mangrove replanting done by women…) 6. When women earn income from their activities, who holds or manages the money? Are there any disagreement that arises from use of income of the wife? Elaborate (probe). 7. Similarly, who holds or manages the income earned by your husband from tuna fishing? Are there disagreements in the use of husband's income? (Elaborate/probe/why). 8. In what ways/areas do you want to have the same access to resources as your husbands? 9. What benefits does the family get when women participate/are more involved in the fishing value chain, such as vending/ processing?
Knowledge, beliefs and perceptions	Knowledge 1. Who are involved in the management of tuna fisheries? 2. What are the agencies (GA, NGA) that have projects that aim to improve management of tuna fisheries?
	Beliefs
	Perception 1. What benefits, if any, has the tuna industry brought to your lives and that of your community? (Probe) 2. What problems, if any, has the tuna industry brought to your lives and that of your community? (Probe)
Practices and Participation	1. Do you have women's organizations in your community? Are you a member/ officer of this women's organization? Why? 2. What kind of fisheries management projects do you know (e.g. close season, mangrove reforestation /rehab, restrictions of gear or species caught, IEC on CRM, AR deployment, etc.)? 3. What are the fisheries management activities that you are involved in? Why? 4. What benefits do you get from your participation in fisheries management? 5. What will make you get more involved in fisheries management? 6. What incentives would encourage you to participate in fisheries management? 7. What would interest you to adopt the CDT? 8. What would interest you to participate in reporting scheme of IUU? 9. (Then probe) What changes have you seen (e.g. in how you see yourself, in how you are treated in household, how others in community) due to your participation in fisheries management? (e.g. skills, income, exposure, awareness, confidence?) 10. Have these changes translated into increased decision making? 11. What are husbands' opinion of wives who actively participate in fisheries management? How has it changed? Why? What about the other women's perception? 12. Did women's participation in fisheries related projects undermine or support women's empowerment? Why? 13. What are the barriers to meaningful participation of women in fisheries and in the community? (For male FGD, ask barriers for both men and women) 14. How else can we enhance women's participation in fisheries management? 15. What do you think is the effect on your household if you (women) participate more actively in fisheries management activities?
Space and Time	1. Appropriate Follow up: e.g. why do only men/women do XXXX activities? (depending

<table>
<tr><td></td><td>on no. 1, probe e.g. why only women do the laundry. What inputs do men have in household work? Are women willing to go to sea? Why/why not?
2. Are you satisfied with your responsibilities as wife? Or do you wish you had more or fewer responsibilities, or totally different responsibilities? (ask same with husbands)
3. What kind of future do you want for your girls? (e.g. Marry someone like your husband? Etc.) For your boys? (time aspiration indicator)</td></tr>
<tr><td>Legal Rights and Status</td><td>1. Are there local legislations that promote women's participation and empowerment in the fisheries management? What are these? (If none, probe why)
2. Are there customary practices that encourage men and women's participation in fisheries management? What are these?
3. Do women and men have legal representation in special bodies such as the Local Development Council (barangay or Municipal)? (probe answer)
4. How will women's improved status affect the power relations inside the home? In the workplace?</td></tr>
<tr><td>Power</td><td>1. Decision-making (Review results from survey, to formulate more pointed discussion questions which do not repeat survey questions)

<table><tr><td></td><td>Men</td><td>Women</td></tr><tr><td>A. Within the Household</td><td></td><td></td></tr><tr><td>1.. Budgeting</td><td></td><td></td></tr><tr><td>2. Family Planning</td><td></td><td></td></tr><tr><td>3. School of Children</td><td></td><td></td></tr><tr><td>4. Choice of Employment</td><td></td><td></td></tr><tr><td>5.Health of Family Member, Etc</td><td></td><td></td></tr><tr><td>B. Community</td><td></td><td></td></tr><tr><td>1. Participation in Church Activities</td><td></td><td></td></tr><tr><td>2. Volunteer Work As BHW/BNS</td><td></td><td></td></tr><tr><td>3. Bantay Dagat/ Fish Warden</td><td></td><td></td></tr><tr><td>4. Bantay Bakawan</td><td></td><td></td></tr><tr><td>5. MPA Management Committee</td><td></td><td></td></tr><tr><td>6. PTA, etc.</td><td></td><td></td></tr><tr><td>C. People's Organization</td><td></td><td></td></tr><tr><td>1. Membership</td><td></td><td></td></tr><tr><td>2. Officer</td><td></td><td></td></tr></table>
2. Which areas do men have greater decision-making power, and which areas are women's?
3. What are the constraints in men's and women's participation in decision making?

4. Could there be unintended negative consequences if women will have greater voice in decision-making?</td></tr>
</table>

Male Fishers

Preliminaries	**Prayer (optional)** **Introduction of participants and facilitators** **Objectives of FGD:** 1) Probe on the roles and relations of men and women in the tuna value chain; 2) Determine the role of women in fisheries management; and

	3) Identify strategies to enhance women's participation in fisheries management. **Informed Consent: voluntary participation, rule of confidentiality, etc.**
Access to assets (Survey results can be used to probe questions: this may be in resources/services where survey shows the least participation from women e.g. access to credit and training-	<table><tr><th>Resources and Services</th></tr><tr><td>1. Capital</td></tr><tr><td>2.Credit</td></tr><tr><td>3. Technology, fishing boat gears</td></tr><tr><td>4. Labor</td></tr><tr><td>5. trainings</td></tr><tr><td>6. processing facilities</td></tr><tr><td>7. Market</td></tr><tr><td>8. Political representation</td></tr><tr><td>9. Information</td></tr><tr><td>10. Land</td></tr><tr><td>11. Social networks</td></tr><tr><td>12. Employment</td></tr><tr><td>13. Benefits</td></tr></table> 1. Do you agree that women usually access credit for fishing enterprises? What happens if it is the men who access credit? (Do similar questions as #1 for other critical areas (e.g. information, technology, etc). 2. If women wanted to participate in a training or workshop, who can they approach? Why? (Probe/discuss). 3. If there was a training that women are invited to attend, where would you recommend that training or workshop be held? For how long (schedule that works for them)? 4. If women are invited to attend a training program, in what way are they able to find time to do so, in relation to their household and other tasks? 5. What is the reaction of your husbands when you (wives) are asked to participate in projects/activities/training especially related to fishing? If not favorable, how do you think this can change? 6. When the women are given an income-generating project in what ways are the men involved in the project? (For example mangrove replanting done by women…) 7. When women earn income from their activities, who holds or manages the money? Are there any disagreement that arises from use of income of the wife? Elaborate (probe). 8. Similarly, who holds or manages the income earned by your husband from tuna fishing? Are there disagreements in the use of husband's income? (Elaborate/probe/why). 9. In what ways/areas do you want to have the same access to resources as your husbands? 10. In what ways/areas do you want to have the same control to resources as your husbands? 11. In what ways/areas do you want your husbands to have the same access/ control to resources as you (if there is any area where males have less access and control). 12. What benefits does the family get when women participate/are more involved in the fishing value chain, such as vending/ processing?
Knowledge, beliefs and perceptions	Knowledge 1. Who are involved in the management of tuna fisheries? 2. What are the agencies (GA, NGA) that have projects that aim to improve management of tuna fisheries?
	Beliefs
	Perception

<table>
<tr><td></td><td>1. What benefits, if any, has the tuna industry brought to your lives and that of your community? (Probe)
2. What problems, if any, has the tuna industry brought to your lives and that of your community? (Probe)</td></tr>
<tr><td>Practices and Participation</td><td>1. Do you have fisherfolks organizations in your community? Are you a member/ officer of this organization? Why?
2. What kind of fisheries management projects do you know (e.g. close season, mangrove reforestation /rehab, restrictions of gear or species caught, IEC on CRM, AR deployment, etc.)?
3. What are the fisheries management activities that you are involved in? Why?
4. What benefits do you get from your participation in fisheries management?
5. What will make you get more involved in fisheries management?
6. What incentives would encourage you to participate in fisheries management?
7. What would interest you to adopt the CDT?
8. What would interest you to participate in reporting scheme of IUU?
9. (Then probe) What changes have you seen (e.g. in how you see yourself, in how you are treated in household, how others in community) due to your participation in fisheries management? (e.g. skills, income, exposure, awareness, confidence?)
10. Have these changes translated into increased decision making?
11. What are wives' opinion of husband who actively participate in tuna fisheries? How has it changed? Why? What about the other men's perception?
12. How do men see other men who are active in tuna fisheries?
13. Did women's participation in fisheries related projects undermine or support women's empowerment? Why?
14. What are the barriers to meaningful participation of women in fisheries and in the community? (For male FGD, ask barriers for both men and women)
15. How else can we enhance women's participation in fisheries management?
16. What do you think is the effect on your household if women participate more actively in fisheries management activities?</td></tr>
<tr><td>Space and Time</td><td>(Prepare matrix; composite answer of FGD pax)

1. Appropriate Follow up: e.g. why do only men/women do XXXX activities? (depending on no. 1, probe e.g. why only women do the laundry. What inputs do men have in household work? Are women willing to go to sea? Why/why not?
2.Are you satisfied with your responsibilities as husband? Or do you wish you had more or fewer responsibilities, or totally different responsibilities? (ask same with wife)
3.What kind of future do you want for your girls? (e.g. Marry someone like your wife? Etc.) For your boys? (time aspiration indicator)</td></tr>
<tr><td>Legal Rights and Status</td><td>1. Are there local legislations that promote women's participation and empowerment in the tuna fisheries value chain? What are these? (If none, probe why)
2. Are there customary practices that encourage men and women's participation in the tuna fisheries value chain? What are these?
3. Do women and men have legal representation in special bodies such as the Local Development Council (barangay or Municipal)? (probe answer)
4. How will women's improved status affect the power relations inside the home? In the workplace?</td></tr>
<tr><td>Power</td><td>1. Decision-making (Review results from survey, to formulate more pointed discussion questions which do not repeat survey questions)

<table><tr><td></td><td>Men</td><td>Women</td></tr><tr><td>A. Within the Household</td><td></td><td></td></tr><tr><td>1.. Budgeting</td><td></td><td></td></tr></table></td></tr>
</table>

2. Family Planning		
3. School of Children		
4. Choice of Employment		
5. Health of Family Member, etc.		
B. Community		
1. Participation in Church Activities		
2. Volunteer Work As BHW/BNS		
3. Bantay Dagat/Fish Warden		
4. Bantay Bakawan		
5. MPA Management Committee		
6. PTA, etc.		
C. People's Organization		
1. Membership		
2. Officer		

2. Which areas do men have greater decision-making power, and which areas are women's?
3. What are the constraints in men's and women's participation in decision making?

4. Could there be unintended negative consequences if women will have greater voice in decision-making?

Processors

Preliminaries	**Prayer (optional)** **Introduction of participants and facilitators** **Objectives of FGD:** 1) Probe on the roles and relations of men and women in the tuna value chain; 2) Determine the role of women in fisheries management; and 3) Identify strategies to enhance women's participation in fisheries management. **Informed Consent: voluntary participation, rule of confidentiality, etc.**
Access to assets (Survey results can be used to probe questions: this may be in resources/services where survey shows the least participation from women e.g. access to credit and training-	**Resources and Services** 1. Capital 2.Credit 3. Technology, fishing boat, gears 4. Labor 5. trainings 6. processing facilities 7. Market 8. Political representation 9. Information 10. land 11. social networks 12. employment 13. benefits 1. Is there a labor union in most of these processing facilities? What is the male-female proportion among the officers of the labor union? Why is this so? (Meaning either why there are few or why there are equal or more women? 2. In general, how does the processing plant hire its workers like you? Probe/elaborate. 3. Is there a preference for men or women in your line of work? Why?

	4. Aside from you, are there other family members who also work in fish processing? Why is this so? 5. In the processing plants you work in, who is usually the person in charge? Is that person male or female? If male/female, why do you think that is so? Who do you think is more effective in overseeing the operation – male or female? Why? 6. If you, as workers in the cannery/processing plant need to borrow for any purpose, who would you approach and how easy or difficult is it to borrow? Discuss reasons for their answers. 7. Do you agree that women, rather than men, are the ones who usually access credit? Probe: which expenditures do women/wives usually borrow for vs. what men/husbands borrow for? Discuss responses related to differential roles of men and women in obtaining credit and why. 8. Do men and women workers in your plant have equal access to information about new processing methods? Equipment? Training? (Do similar questions as this no. 6 for other areas relevant to their work as shown in survey data.) 9. If women processors wanted to participate in a training related to their work, who can they approach in the organization/firm? Why? (Probe/discuss). (THE FOLLOWING MAY BE ASKED, IF APPLICABLE TO FGD PARTICIPANTS' EXPERIENCE IN THE PLANT: A. If there was a training that women are invited to attend, where would you recommend that training or workshop be held? For how long (schedule that works for them)? B. If women are invited to attend a training program, in what way are they able to find time to do so, in relation to their household and other tasks?) 10. What is the reaction of your husbands that you work in canneries/ processing plants? Do they encourage it or does your working create issues in your household? If not favorable, how do you think this situation can change? 11. Who holds or manages the money you earn as fish processors? (i.e. husband, wife, others)? Are there any disagreement that arises from use of your (wife) income? Elaborate (probe). 12. Similarly, who holds or manages the income earned by your husband? Are there disagreements in the use of husband's income? (Elaborate/probe/why). 13. In what ways/areas do you want to have the same access to resources as your husbands? 14. In what ways/areas do you want to have the same control to resources as your husbands? 15. In what ways/areas do you want your husbands to have the same access/ control to resources as you (if there is any area where males have less access and control). 16. What benefits does the family get when women participate/are more involved in the fishing value chain, such as vending/ processing?
Knowledge, beliefs and perceptions	Knowledge 1. Who are involved in the management of tuna fisheries? 2. What are the agencies (GA, NGA) that have projects that aim to improve management of tuna fisheries?
	Beliefs
	Perception 1. What benefits, if any, has the tuna industry brought to your lives and that of your community? (Probe) 2. What problems, if any, has the tuna industry brought to your lives and that of your community? (Probe)
Practices and Participation	1. What benefits do you get from your work in fish processing plant? Note: e.g. economic, socialization. 2. (Then probe) What changes have you seen (e.g. in how you see yourself, in how you are treated in household, how relatives and others in community treat you) due to your work as fish processor? (e.g. skills, income, exposure, awareness, confidence?) 3. Further to 3.2, have these changes translated into increased decision making?

<table>
<tr><td></td><td>4. What are husbands' opinion of wives who actively work in fish processing plants? How has opinion changed, if any? Why? (SIMILAR QUESTION ASKED IN NO. 8 UNDER ACCESS DOMAIN, but ask again as counter check and to lead to the next question 3.5)
5. What about other women's perception
6. Does women's participation in fisheries (like fish processing) undermine or support women's empowerment?
7. What improvements in your work conditions (e.g. physical, compensation, relationship at work, etc.) would increase your welfare and satisfaction as workers in fish processing plant? Please be specific in your suggestions.
8. What are the barriers to meaningful participation of women in fisheries and in the community?
9. How else can we enhance women's participation in (tuna) fisheries VC?
10. How can we ensure that men and women equitably share in the benefits of working in fish processing industry?</td></tr>
<tr><td>Space and Time</td><td>(We asked for the 24-hour activity profile in the survey. Results can be used to ask for probing questions. (Prepare matrix; composite answer of FGD pax)

1. Appropriate Follow up: e.g. why do only men/women do XXXX activities? (depending on no. 1, probe e.g. why only women do the laundry. What inputs do men have in household work? Are women willing to go to sea? Why/why not?
2. Are you satisfied with your responsibilities as wife/husband? Or do you wish you had more or fewer responsibilities, or totally different responsibilities?
3. What kind of future do you want for your girls? (e.g. Marry someone like your wife? Etc.) For your boys? (time aspiration indicator)
4. Are you satisfied with your present work or do you have aspirations beyond what you are currently doing as fish processor? What are these work aspirations? What are the barriers to reaching your aspirations? Discuss.</td></tr>
<tr><td>Legal Rights and Status</td><td>1. Are there local legislations that promote women's participation and empowerment in the tuna fisheries value chain? What are these? (If none, probe why)
2. Are there customary practices that encourage men and women's participation in the tuna fisheries value chain? What are these?
3. Do women and men have legal representation in special bodies such as the Local Development Council (barangay or Municipal)? (probe answer)
4. How will women's improved status affect the power relations inside the home?In the workplace?
5. What laws and policies do you recommend which can improve the conditions of women in the fish processing industry, such as the processing plants you work in?</td></tr>
<tr><td>Power</td><td>1. Decision-making(Review results from survey, to formulate more pointed discussion questions which do not repeat survey questions)

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</table>
</td></tr>
</table>

	2. Which areas do men have greater decision-making power, and which areas are women's? 3. What are the constraints in men's and women's participation in decision making? 4. Could there be unintended negative consequences if women will have greater voice in decision-making?

Intermediaries (Male and Female)

Preliminaries	**Prayer (optional)** **Introduction of participants and facilitators** **Objectives of FGD:** 1) Probe on the roles and relations of men and women in the tuna value chain; 2) Determine the role of women in fisheries management; and 3) Identify strategies to enhance women's participation in fisheries management. **Informed Consent: voluntary participation, rule of confidentiality, permission to take photos and record conversation, etc.**
Access to assets (Survey results can be used to probe questions: this may be in resources/services where survey shows the least participation from women e.g. access to credit and training-	**Resources and Services** 1. Capital 2.Credit 3. Technology, fishing boat, gears 4. Labor 5. trainings 6. processing facilities 7. Market 8. Political representation 9. Information 10. land 11. social networks 12. employment 13. benefits 1. If you want to get credit/borrow for a livelihood project, who would you approach and how easy or difficult is it to borrow? Discuss reasons for their answers. 2. Do you agree that women usually access credit for fishing enterprises? What happens if it is the men who access credit? (Do similar questions as #1 for other critical areas (e.g. information, technology, etc) as shown in survey data. 3. If women wanted to participate in a training or workshop, who can they approach? Why? (Probe/discuss). 4. If there was a training that women are invited to attend, where would you recommend that training or workshop be held? For how long (schedule that works for them)? 5. If women are invited to attend a training program, in what way are they able to find time to do so, in relation to their household and other tasks? 6. What is the reaction of your husbands/wives when you are asked to participate in projects/activities/training especially related to fishing? If not favorable, how do you think this can change? 7. When women are given an income-generating project in what way are your husbands involved in the project? (For example mangrove replanting done by women…) 8. When women earn income from their activities, who holds or manages the money? Are there any disagreement that arises from use of income of the wife? Elaborate (probe).

	9. Similarly, who holds or manages the income earned by your husband from tuna fishing (as an intermediary)? Are there disagreements in the use of husband's income? (Elaborate/probe/why). 10. In what ways/areas do you want to have the same access to resources as your husbands?
Knowledge, beliefs and perceptions	Knowledge 1. Who are involved in the management of tuna fisheries? 2. What are the agencies (GA, NGA) that have projects that aim to improve management of tuna fisheries?
	Beliefs
	Perception 1. What benefits, if any, has the tuna industry brought to your lives and that of your community? (Probe) 2. What problems, if any, has the tuna industry brought to your lives and that of your community? (Probe)
Practices and Participation	1. Do you have an organization of (intermediaries? Are you a member/officer of this organization? Why? 2. What kind of fisheries management projects do you know? (e.g. close season, mangrove reforestation/rehab, restrictions of gear or species caught, IEC on CRM, AR deployment, etc) 3. What are the fisheries management activities that you are involved in? Why? 4. What benefits do you get from your participation in fisheries management? 5. What will make you get more involved in fisheries management? 6. What incentives would encourage you to participate? 7. What would interest you to adopt the CDT? 8. What would interest you to participate in reporting scheme of IUU? IF NO participation in fisheries management proceed to Question No.14 9. (Then probe) What changes have you seen (e.g. in how you see yourself, in how you are treated in household, how others in community) due to your participation in tuna fisheries? (e.g. skills, income, exposure, awareness, confidence?) 10. Have these changes translated into increased decision making? 11. What are husbands' opinion of wives who actively participate in tuna fisheries? How has it changed? Why? What about the other women's perception? 12. How do women perceive other women who are active in tuna fisheries? 13. Did women's participation in fisheries related projects undermine or support women's empowerment? 14. What are the barriers to meaningful participation of women in fisheries management and in the tuna VC? 15. How else can we enhance women's participation in tuna fisheries VC? 16. How can we ensure that men and women equitably share in the benefits of tuna fisheries VC? (disaggregate VC in fishing, processing and selling)
Space and Time	(We asked for the 24-hour activity profile in the survey. Results can be used to ask for probing questions. (Prepare matrix; composite answer of FGD pax) 1. Appropriate Follow up: e.g. why do only men/women do XXXX activities? (depending on no. 1, probe e.g. why only women do the laundry. What inputs do men have in household work? Are women willing to go to sea? Why/why not? 2. Are you satisfied with your responsibilities as wife/husband? Or do you wish you had more or fewer responsibilities, or totally different responsibilities? 3. What kind of future do you want for your girls? (e.g. Marry someone like your wife? Etc.) For your boys? (time aspiration indicator)

<table>
<tr><td>Legal Rights and Status</td><td>1. Are there local legislations that promote women's participation and empowerment in the tuna fisheries value chain? What are these? (If none, probe why)
2. Are there customary practices that encourage men and women's participation in the tuna fisheries value chain? What are these?
3. Do women and men have legal representation in special bodies such as the Local Development Council (barangay or Municipal)? (probe answer)
4. How will women's improved status affect the power relations inside the home? In the workplace?</td></tr>
<tr><td>Power</td><td>1. Decision-making (Review results from survey, to formulate more pointed discussion questions which do not repeat survey questions)

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2. Which areas do men have greater decision-making power, and which areas are women's?
3. What are the constraints in men's and women's participation in decision making?
4. Could there be unintended negative consequences if women will have greater voice in decision-making?</td></tr>
</table>

B. Key Informant Interview

KII Guide (Set A)

For VC Enablers: BFAR, DOST, DTI, PFDA, MARINA, ECPC (Macro)

I. Self-Introduction and statement of purpose

II. Reaction to Conforme

III. Guide Questions

A. Personal Information Data

No.	Item	Answer
1	Name	
2	Affiliation/Agency	
3	Address of Agency	
4	Contact Number(s)	
5	Position	
6	No. of years in the Agency	
7	Involvement in the tuna Industry	

B. Work-related Information

No.	Main Question	Probe
1	Access to resources How has your agency ensured that women have access to resources in the tuna industry?	a) Trainings for men? Women? *What trainings? (skills training, credit management, entrepreneurship) Who attends?* b) Financing assistance for men? Women? *Types? Terms? Who avails?* c) Technical support for men? Women? *Types? Who avails Who adopts?* d) Technology transfer for women? Women? *Types? Who adopts?* e) Information dissemination for men? Women? *Types? Who mostly use the info?* f) Legal and social protection for women? For Men? *SSS/PhilHealth/other provisions of the labor code*
2	Women's Participation How has your agency ensured utmost women's participation in the tuna industry?	a) In production *Introduction of women-friendly fishing gears? (Specify). How did it affect women's productivity? Her home time? Her relationship with husband and children?* b) In processing *Introduction of women-friendly post-harvest facilities? (specify) How did it affect women's productivity? Her home time? Her relationship with husband and children?* c) In marketing/trading *Opportunities provided to increase women's marketing and entrepreneurial engagement? (specify)*

3	Decision making In what ways has your agency helped enhance the decision-making space of women in the tuna industry?	a) Organization of coops/groups (women's groups) *Types/names of organization? Functional? Why or why not? Who mostly participates? Positions occupied by men/women.* b) Membership in consultative councils/committees *Specify the committees. Who mostly participates? Positions occupied by men/women.* c) Others *Specify other ways of involving women in decision making.*
4	EAFM and CDT In what ways have women been involved and engaged in EAFM and CDT?	a) What agency EAFM-related projects/programs have women been involved? *Specify project/program? Specify women's involvement. Have women been effective in their role?* b) What concerns/issues emerged from women's involvement (or non-involvement) in EAFM and CDT activities? c) How can women strengthen EAFM and CDT initiatives?
5	Policy Recommendations How can your agency help women become more visible and more effective partners in EAFM and CDT initiatives in the tuna industry?	a) In project planning and formulation b) In project implementation c) In project monitoring and evaluation d) Others: control, surveillance
6	Further observations regarding gender differentials in the tuna industry particularly in EAFM and CDT.*Whom would you like to tap more for EAFM and CDT? Why?*	

C. GAD Information

No.	Item	Answer
1	What proportion of the agency personnel have undergone basic gender sensitivity trainings?	a) Among all staff b) Among field staff c) Among those directly involved in EAFM and CDT
2	Does the agency maintain sex-disaggregated data?	*Cite examples, if any*
3	How is GAD integrated in the agency functions that are related to EAFM and CDT?	a) In its programs/projects? b) In its policies? c) In its plans?
4	Any suggestion on how to strengthen GAD mainstreaming in agency PPAs (projects, plans, activities)?	

KII Guide (Set B)

For VC Enablers: LGU
(Macro)

I. Self-Introduction and statement of purpose

II. Reaction to Conforme

III. Guide Questions

A. Personal Information Data

No.	Item	Answer
1	Name	
2	LGU (Municipality/Province)	
3	Office/Unit	
4	Contact Number(s)	
5	Position	
6	No. of years in the current position	
7	Office mandate (related to the tuna Industry)	

B. Work-related Information

No.	Main Question	Probe
1	Access to resources Are there LGU initiatives that aim to enhance women's access to resources in the tuna industry?	a) Trainings for men? Women? *What trainings? (skills training, credit management, entrepreneurship) Who attends?* b) Financing assistance for men? Women? *Types? Terms? Who avails?* c) Technical support for men? Women? *Types? Who avails? Who adopts?* d) Technology transfer for women? Women? *Types? Who adopts?* e) Information dissemination for men? Women? *Types? Who mostly use the info?* f) Legal and social protection for women? For Men? *SSS/PhilHealth/other provisions of the labor code*
2	Women's Participation What are LGU initiatives aimed at promoting increased women's participation in the tuna industry?	a) In production *Introduction of women-friendly fishing gears? (Specify). How did it affect women's productivity? Her home time? Her relationship with husband and children?* b) In processing *Introduction of women-friendly post-harvest facilities? (specify) How did it affect women's productivity? Her home time? Her relationship with husband and children?* c) In marketing/trading *Opportunities provided to increase women's marketing and entrepreneurial engagement? (specify)*
3	Decision making How has the LGU helped enhance the decision-making	a) Organization of coops/groups (women's groups) *Types/names of organization? Functional? Why or why not? Who mostly participates? Positions occupied by men/women.* b) Membership in consultative councils/committees

	space of women in the tuna industry?	*Specify the committees. Who mostly participates? Positions occupied by men/women.* c) Others *Specify other ways of involving women in decision making.*
4	<u>EAFM and CDT</u> In what ways have women been involved and engaged in EAFM and CDT?	a) What EAFM-related projects/programs have women been involved in? *Specify project/program? Specify women's involvement. Have women been effective in their role?* b) What concerns/issues emerged from women's involvement (or non-involvement) in EAFM and CDT activities? c) How can women strengthen EAFM and CDT initiatives?
5	<u>Policy Recommendations</u> How can the LGU help women become more visible and more effective partners in EAFM and CDT initiatives in the tuna industry?	a) In project planning and formulation b) In project implementation c) In project monitoring and evaluation d) Others: control, surveillance
6	What resolutions can LGU pass towards empowering women in the tuna industry? *In small-scale fisheries?* *In large-scale fisheries?* What gender issues will these local policies address?	
7	Further observations regarding gender differentials in the tuna industry particularly in EAFM and CDT. *Whom would you like to tap more for EAFM and CDT? Men? Women? Why?*	

C. GAD Information

No.	Item	Answer
1	What proportion of the LGU personnel have undergone basic gender sensitivity trainings?	a) Among all staff b) Among field staff c) Among those directly involved in EAFM and CDT
2	Does the LGU maintain sex-disaggregated data?	*Cite examples, if any*
3	How is GAD integrated in the LGU functions that are related to EAFM and CDT?	a) In its programs/projects? b) In its policies? c) In its plans?
4	Any suggestion on how to strengthen GAD mainstreaming in the LGU's PPAs (projects, plans, activities)?	

KII Guide (Set C)

For VC Players: Large-scale fisheries
(Canneries)

I. Self-Introduction and statement of purpose

II. Reaction to Conforme

III. Guide Questions

A. Personal Information Data

No.	Item	Answer
1	Name	
2	Company/Firm	
3	Address of Company/Firm	
4	Contact Number(s)	
5	Current Position	
6	No. of years in the Company/Firm	
7	Involvement/role in the tuna Industry	

B. Work-related Information

No.	Main Question	Probe
1	Access to resources How has your company/ firm ensured that women have access to resources?	a) Trainings for men? Women? *What trainings? (skills training, credit management, entrepreneurship)* *Who attends?* b) Financing assistance for men? Women? *Types? Terms? Who avails?* c) Technical support for men? Women? *Types? Who avails? Who adopts?* d) Technology transfer for women? Women? *Types? Who adopts?* e) Information dissemination for men? Women? *Types? Who mostly use the info?* f) Legal and social protection for women? for Men? *SSS/PhilHealth/other provisions of the labor code*
2	Women's Participation How has company/firm ensured utmost women's participation in the workplace?	a) In production *Introduction of women-friendly fishing gears? (Specify). How did it affect women's productivity? Her home time? Her relationship with husband and children?* b) In processing *Introduction of women-friendly post-harvest facilities? (specify) How did it affect women's productivity? Her home time? Her relationship with husband and children?* c) In marketing/trading *Opportunities provided to increase women's marketing and entrepreneurial engagement? (specify)*
3	Decision making In what ways has your company/firm helped enhance the decision-making space of women in the workplace?	a) Positions occupied by women? By men? (% distribution) *Highest position occupied by a woman:* *Supervisory positions:* *Rank and file:* *Assembly line:*

		Others: b) Membership in committees *Specify the committees. Who mostly participates? Positions occupied by men/women.* c) Others *Specify other ways of involving women in decision-making.*
4	<u>EAFM and CDT</u> In what ways have women been involved and engaged in EAFM and CDT?	a) What company/firm EAFM-related projects/programs have women been involved? *Specify project/program? Specify women's involvement. Have women been effective in their role?* b) What concerns/issues emerged from women's involvement (or non-involvement) in EAFM and CDT activities? c) How can women strengthen EAFM and CDT initiatives?
5	<u>Policy Recommendations</u> How can your company/ firm help women become more visible and more effective partners in EAFM and CDT initiatives?	a) In project planning and formulation b) In project implementation c) In project monitoring and evaluation d) Others: control, surveillance
6	Further observations regarding gender differentials in the tuna industry particularly in EAFM and CDT. *Whom would you like to tap more for EAFM and CDT? Why?*	

C. GAD Information

No.	Item	Answer
1	What proportion of the company/firm personnel have undergone basic gender sensitivity trainings?	a) Among all staff b) Among field staff c) Among those directly involved in EAFM and CDT
2	Does the company/firm maintain sex-disaggregated data?	*Cite examples, if any*
3	How is GAD integrated in the company/firm functions that are related to EAFM and CDT?	a) In its programs/projects? b) In its policies? c) In its plans?
4	Any suggestion on how to strengthen GAD mainstreaming in company/firm PPAs (projects, plans, activities)?	a) Recruitment b) Firing c) Benefits d) Opportunities e) Working conditions f) Others

ANNEX 4. EXCERPTS FROM THE MAGNA CARTA OF WOMEN

Excerpts from Provisions in the Magna Carta of Women (MCW) That Create an Enabling Environment

Excerpts from Provisions in the Magna Carta of Women Relevant to The Tuna Value Chain	Nodes					
	Producers		Processors		Traders	
	M	F	M	F	M	F
Rule V. Rights and Empowerment of Marginalized Sectors **Sec. 23. Food Security and Productive Resources**.						
The State recognizes the contribution of women to food production and shall ensure its sustainability and sufficiency with the active participation of women… The Department of Agriculture (DA), in coordination with other concerned departments, LGUs and stakeholders shall						
(b) recognize women as farmers and fisherfolk and give them equal and opportunities to participate in programs and projects;		x		x		x
(c) ensure the active and direct participation of rural women's groups other than Rural Improvement Clubs, in policy formulation, planning and designing, implementation, monitoring and evaluation of DA programs at the local levels;		x				
B. Right to Resources for Food Production						
Equal access to the use and management of fisheries and aquatic resources, and all the rights and benefits accruing to stakeholders in the fishing industry shall be guaranteed. Further: 6-b. LGUs shall maintain an updated database of women fisherfolk that may be accessed by BFAR, PCW and other interested institutions for program development and policymaking; and		x		x		x
7. …The LGUs and BFAR shall ensure the full participation of women in the planning, designing, implementation, monitoring and evaluation of coastal resource management programs; and designate coastal areas to be managed by women.		x				
8. There shall be no discrimination against women in the deputation of fish wardens		x				
9-c. The BFAR and Philippine Fisheries Development Authority (PFDA) shall design and promote the use of women-friendly fishing gears and post-harvest facilities and equipment.		x		x		
9-g. DA and LGU shall ensure participation of rural women by tapping existing people's organizations, NGOs and rural women's groups in their training on food production with emphasis on sustainable agriculture and fisheries…		x				

12-a. DA, DTI and other concerned agencies shall provide support for marketing, credit, technologies and training for women, and		x		x		x
12-b. Ensure membership of marginalized women in councils for sustainable development that are created pursuant to existing laws.		x		x		
13-a. Provide capability building program to promote greater bankability and worthiness of municipal and small-scale women commercial fishers. Such programs shall include organizing activities, technology transfer and skills training related to commercial fishing as well as credit management.		x		x		x
13-b. Conduct information campaign to promote the capability building and credit programs to women fisherfolks; and		x		x		x
14-b. DA, DTI, TESDA, NCIP, DENR and SUCs/HEIs shall provide training on marketing of agricultural and forestry products to ensure delivery of produce, these include market opportunity awareness, technology transfer on processing, labelling and packaging		x		x		x
Section 25. Right to Decent Work – The state shall progressively realize and ensure decent work standards for women that involves the creation of jobs of acceptable quality in conditions of freedom, equity, security and human dignity. The DOLE in the case of the private sector and the CSC in the case of the public sector shall: Together with other concerned agencies ensure the provision of support services and gears to protect women' from occupational and health hazard taking into account women's maternal functions…		x x		x		x
Sec. 26. Right to Livelihood, Credit, Capital and Technology. – The State shall ensure that women are provided with the following: Equal access to formal sources of credit and capital; Equal share to the produce of farms and aquatic resources…		 x x		x x x		x x x
Section 27. Right to Education and Training Gender sensitivity training and seminars. All government and private training and learning providers shall develop and implement gender sensitivity training**…**	x	x	x	x	x	x
Sec. 28. Right to Representation and Participation – The State shall ensure women's participation in policy-making or decision-making bodies in the national, regional, and local levels. All national government agencies shall ensure that their existing participatory mechanisms shall include adequate representation of women. A. Concerned agencies, in cooperation with women's organizations, shall implement capability-building and leadership formation programs as well as undertake affirmative action measures to enable grassroots women leaders to effectively participate in the decisions and policy-making bodies in their						

respective sectors, including but not limited to the following bodies						
National Agricultural and Fishery Council (NAFC) and its local counterparts;	x	x	x	x	x	x
National Fisheries and Aquatic resources management Council (NFARMC) and its local counterparts	x	x	x	x	x	x
The State shall institute policies and programs that seek to reduce the poverty and vulnerability to risks and enhance the social status and rights of the marginalized women by promoting and protecting livelihood and employment, protecting against hazards and sudden loss of income, and improving people's capacity to manage risks	x	x	x	x	x	x
• **Rule VI. Institutional Mechanisms**						
Section 37. …all government agencies, offices, bureaus, instrumentalities, SUCs, GOCCs, and LGUs shall pursue the adoption of gender mainstreaming as a strategy to promote and fulfil women's human rights and eliminate gender discrimination in their systems, structures, policies, programs, processes and procedures such as the following:						
Planning, Budgeting, Monitoring and Evaluation for GAD…	x	x	x	x	x	x
1-c. At least five percent (5%) of the total agency or LGU budget appropriations shall correspond to activities supporting GAD plans and Programs	x	x	x	x	x	x
Gender and Development (GAD) Code	x	x	x	x	x	x
B-1. To ensure sustainable gender-responsive local governance, all LGUs shall develop and pass a GAD Code to support their efforts in recognizing, respecting, protecting, fulfilling and promoting women's human rights towards the attainment of women's empowerment and gender equality in their locality…	x	x	x	x	x	x

ANNEX 5. LIST OF COLLABORATING INSTITUTIONS

Partner Institutions	Roles
Local Government Unit- General Santos City/Office of the Vice Mayor	Secondary data: GAD Code; access to barangays and offices though endorsements and referrals; presence during inception meeting
Bureau of Fisheries and Aquatic Resources Region 12	Secondary data; lists for sampling frame; assistance in the identification of barangay for mock interview and pilot testing of survey instruments; facilitation of ocular and site visits; presence during inception meeting and other coordination meeting; availability of the GAD Focal person and other staff
Philippine Fisheries Development Authority	Access to General Santos Fish Port Complex; secondary data; presence during inception meeting and other coordination meeting;
Office of the City Agriculturist	Secondary data; lists for sampling frame; use of office space for FGD venue; availability of the GAD focal person
Mindanao State University- General Santos	Referrals of translators and enumerators
Department of Trade and Industry Region 12	Secondary data; lists for sampling frame; use of office space for FGD venue
Environmental Conservation and Protection Center	Active participation in the inception meeting
Citra Mina	Active participation in the inception meeting

ANNEX 6. RECOMMENDATIONS FOR POLICY/RESEARCH/ACTION BY IDENTIFIED GENDER ISSUES

Lead Agency	Collaborating Agencies/ Units	Specific Issues to be Addressed	Intervention	Research	Policy	Action
Promoting Gender Equity and Women's Empowerment						
LGU	BFAR, SFFAII, Women's group	Family-work-personal life imbalance: • Simultaneous and competing demands for productive (market) and reproductive (household) labor time; • Family-work responsibilities and tasks reduce women's availability for participation in community life	• Incentives for employers which initiate measures that promote the work-life balance of employees. • Provision of better paying alternative jobs per unit of time, especially for women workers • Lobby for the adoption of flexi-worktime in all enterprises/ employers		x	x
SUCs	SFFAII, BFAR, LGU	Women have less access to profitable markets despite higher educational attainment than men	• Gender sensitization of employers • Provision of alternative jobs			x
LGU	NGAs, NGOs	• Lack of women participation in policy making, program design and project cycle	• Inclusion of women in policy making and program development bodies/ units		x	x
BFAR	Oceans, LGU, SUCs	• Absence of women's groups/ organizations; lack of gender champions at community level	• Organize women's groups • Identify, recognize and engage gender champions			x
SUCs, SFFAII	Oceans, BFAR, LGUs, SFFAII	• Prevalence of beliefs, stereotypes, and practices that hinder women's participation; Stereotypes about women's work and social roles prevail • Limited work spaces for women; recording sales and financial transactions, processing registration and legal documents; and paying salaries and bills	• Gender sensitization • Employers to provide women-friendly work spaces to traditionally male jobs • Write and popularize success stories of women in non-traditional roles • Recognition/Rewards for women role models	x		x

BFAR, LGUs	Women's Group, SFFAII	• Gender discrimination at workplace: no women crew members; male checkers are preferred; decision and control still remain with men	• Incentives for employers who hire workers based on skills and ability and not based on gender		x	x
SUCs	Oceans, Women's group	• Men decide on work matters while women consult spouse and decide on home matters	• Conduct of gender sensitization trainings			x
SUCs	Oceans, DOST, SFFAII	• Lack of women-friendly equipment, tools and machineries, and other fishing paraphernalia to enable women to work	• Conduct research on design of women-friendly equipment, tools and machineries • Technology transfer to private sector	x		x
SFFAII	BFAR, LGU	• Inequitable compensation; underpayment; unpaid work (family labor)	• Provision of alternative jobs			x
Advocating for SFM/EAFM						
SUCs	Oceans, LGU, BFAR	• Low level of knowledge on tuna and fishery regulations	• Production of IEC materials • Information campaigns	x		x
LGU	SFFAII, BFAR, SUCs, Women's group	• Poor adoption and buy-in of actors and enablers on gender mainstreaming, CDT and EAFM	• Include in the application requirements for renewal of licenses and permits, the attendance of heads of organizations in basic gender sensitivity trainings and on CDT/EAFM.		x	x
SUCs	Oceans, LGU, BFAR, SFFAII	• Limited participation of women on EAFM	• Organize women's groups • EAFM Information campaigns • Knowledge, Attitude, Practices, and Skills Survey	x		x
LGU	SUCs, Oceans	• Limited reach of the EAFM program among implementers	• EAFM Information campaigns for implementers			x
NGOs	Oceans, SUCs, BFAR	• Limited involvement and engagement of men and women in fishery organizations	• Organize fishers' groups in the VC nodes			x
SUCs	Oceans, BFAR	• Stereotype that men are for bantay-dagat, women are for coastal clean-up activities.	• Conduct of gender sensitization trainings			x

Implementing CDT						
Oceans	BFAR, SUCs, LGU	• Low level of awareness on CDT; Concept of CDT/EAFM is new to VC players	• Development of manuals and modules on gender-responsive approaches/methodologies • Fund researches to widen perspectives on gender and fisheries. Possible topics: good practices to combat IUU, and women's role in EAFM, standards and guidelines on Key Data Elements • Develop localized and engendered CDT/EAFM Manual for VC players' and enablers' use • Translation of research results into publications, policy advisories, products, and program designs that will enhance a gendered CDT/EAFM implementation	x	x	x
Oceans	BFAR, LGU	• Lack of knowledge and skills on CDT system and/or other fishery regulations	• Orientation of commercial fishers on the CDT system and its importance			x
Oceans SUC	BFAR, LGU	• No idea or poor appreciation on the role of men and women in CDT/EAFM • Lack of orientation and capacity building on CDT for both implementers and partners	• Encourage data sharing among VC enablers, particularly on those related to IUU and sea fraud • Develop and maintain a sex-disaggregated database at all levels of governance by fishery product/sector, that will serve as inputs for policy making and program development • Conduct research and benchmark on best practices on roles and relationships of men and women in CDT/EAFM as basis for planning and policy-making	x		x

Oceans SUC	BFAR, LGU, SFFAII	• No idea or poor appreciation on the role of men and women in CDT/EAFM • Lack of orientation and capacity building on CDT for both implementers and partners	• Conduct of Training of Trainers on Gender-responsive Value Chain Analysis and on CDT/EAFM in order to create a critical local mass of experts • Define and strengthen women's roles/skills in CDT and EAFM implementation (e.g., documentation, recording, monitoring) • Formulate CDT/EAFM training modules for fishers, particularly the women • Mentorship and technology transfer particularly of CDT/ EAFM to local women's groups • Organize women's groups which will champion and advocate gender-responsive interventions along the VC	x		x
Oceans SUC	BFAR, LGU	• No idea or poor appreciation on the role of men and women in CDT/EAFM • Lack of orientation and capacity building on CDT for both implementers and partners	• Conduct of Training of Trainers on Gender-responsive Value Chain Analysis and on CDT/EAFM so as to create a critical local mass of experts • Documentation of success stories • Enhance human capacity of VC players through sensitization workshops on the importance of CDTs and EAFM • Engender and sensitize managers and administrators for buy-in of gender mainstreaming • Private sector to aggressively campaign for the full compliance with the provisions of the Fisheries Code as amended by Republic Act (RA) 10654 that seeks to "prevent, deter and eliminate illegal, unreported and unregulated" or IUU fishing in the country	x	x	x
Oceans	LGU, Women's group, BFAR, CHED, DepEd	• Absence of localized Institutional CDT/EAFM mechanisms	• Formulation and institutionalization of the Gendered Tuna Development Plan/ Roadmap (i.e. inclusion in the Annual Investment Plan and in the Comprehensive Development Plan of the LGU) • Lobby for the mandatory use of the Harmonized Gender and Development Guidelines (HGDG) in assessing all plans, policies, and programs of agencies/units before these are implemented and/or get funded. • Collaborate and/or forge MOA with CHED and DepEd to include in the curriculum the concerns on CDT/EAFM and gender mainstreaming in fisheries and combatting IUU • Engender the Key Data Elements (KDE) of CDT systems	x	x	x

Oceans	LGU, Women's group, BFAR, CHED, DepEd	• Absence of localized Institutional CDT/EAFM mechanisms	• Ensure the representation of women at all phases of any CDT-related project cycle (i.e., program design, implementation and M&E) • The Oceans Program Exit Plan must be clear to all VC players, and a corresponding Action Plan by LGUs must be in place • Strengthen academe-industry-LGU linkages for research and its translation to policy, program and technology transfers • Give recognition or incentives to women's groups/individuals who advocate greater participation of women in CDT and EAFM • Forge PPPs as a sustainability measure in combatting IUU and seafood fraud	x	x	x
Oceans	BFAR, SUCs, LGU	• Absence of localized Institutional CDT/EAFM mechanisms	• Identify, recruit and train local gender champions on CDT/EAFM • Lobby for gender-responsive policies and regulations at all governance levels in order to: • protect the rights and welfare particularly women workers in the tuna industry • address practical and strategic gender needs at all VC nodes	x	x	x
Women's group	Oceans, SUC, LGU	• Absence of fisheries (CDT/ EAFM) component in the GAD Code of General Santos	• Lobby for the inclusion of CDT/EAFM in the GAD code of General Santos City • Encourage use of GAD fund for gender mainstreaming in EAFM and CDT, to include activities to combat IUU		x	x
Oceans	SUC, BFAR	• Perceived additional cost in adopting a new CDT system	• Benchmark on CDT systems and adopt one which is cost-effective and which will not add more burden to the fishers	x		x
Promoting Human Welfare						
Women's Group	Oceans, BFAR, SFFAII, LGU	• Vulnerability of women to sexual harassment in male-dominated workplace; absence of clear policies and processes to handle sexual harassment incidents	• Establishment of Gender Desks at the GSFPC and other work areas e.g. canneries • Full implementation of ASH Act	x	x	x
Women's Group	BFAR, SFFAII, LGU	• Absence of gender-responsive facilities at the General Santos Fish Port Complex and other work areas (e.g. nursing areas, infirmary/clinics)	• Lobby for the approval of tax credits and similar incentives for organizations that provide gender-responsive facilities in the work area.		x	x
Women's group	Oceans, SUC, NGO, BFAR	• Absence of social security and insurance for seasonal workers, contractual	• Develop a social insurance scheme for seasonal, contractual, and/or self-employed workers/fishers • Lobby for measures regarding mandatory provision of protective working gears for workers	x	x	x

Women's group	SUC, NGO, BFAR	• Poor working conditions: long hours of standing, night shifts for women, lack of protective gears/clothing, poor ventilation)	• Monitor employers' compliance to labor laws and regulations			x
Addressing Other Industry Issues						
SUC	Oceans, BFAR, SFFAII	• Weak information flow along the tuna VC (i.e., market information, new technology, supply information)	• Weak information flow along the tuna VC (i.e., market information, new technology, supply information) • Conduct study on how to use new information technology to strengthen flow of information along the tuna value chain	x	x	x
BFAR	Workers' groups, SFFAII, LGU	• Weak horizontal and vertical linkages	• Organize VC players at each node (i.e., fishers group, processors group, traders group) • Enhance participation of small scale VC players in industry- or chain-wide fora • Use of information technology to facilitate communication and collaboration			x
BFAR	LGU, SUC, SFFAII	• Lack of gender mainstreaming and integration	• Promotion of women-friendly gears and technologies • Handhold women workers in the tuna industry to become women entrepreneurs through mentoring activities.		x	x
BFAR	LGU, SUC SFFAII	• Undocumented catch, IUU, poor compliance with CDT	• Information campaign • Production of IEC materials	x	x	x
BFAR	LGU, SUC SFFAII	• low catch due to overfishing, climate change, coast pirating, illegal fishing nets, missing CRM projects specific for tuna	• Monitoring compliance to fishery laws and regulations		x	x
BFAR	LGU	• Poor access to IT	• Technology transfer to VC actors			x
BFAR	Oceans, SUC, LGU	• Limited participation in organizations at each VC node particularly, municipal fisheries	• Develop incentive schemes to encourage active participation of small scale participants in tuna related organizations	x		x