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# ENGAGEMENTS OF WOMEN AND MEN IN THE MUNICIPAL AND COMMERCIAL TUNA FISHERIES IN SARANGANI PROVINCE, PHILIPPINES

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### Introduction

- Gen. Santos City and the six coastal municipalities of Sarangani bounds the 15,950-hectare Sarangani Bay Protected Seascape (SBPS).
- The Bay possesses multi-species marine resources
- Fish landing surveys identified 11 species of fish, foremost of which are tunas
- Gen. Santos City is the center of the Philippines tuna industry and the country has huge earnings from tuna exports

### Introduction, continued

 Due to its ecological and economic importance USAID-SEAFDEC Oceans and Fisheries Partnership chose the SBPS and nearby Sulawesi Sea as a learning site for its project with WorldFish

**Goal:** To strengthen regional cooperation to combat IUU fishing, promote sustainable fisheries, and conserve marine biodiversity in the Asia-Pacific region

### Introduction, continued

A Rapid Appraisal of the Fisheries Mgt. Systems in Sarangani was conducted to provide inputs for a catch documentation and traceability (CDT) system and sustainable fisheries management plan using the value chain approach

✓ Tuna trade is a vital global industry and needs to be sustained vis-à-vis declining fish stocks. Moreover, overseas buyers and consumers wish to purchase sustainably caught seafood and CDT is required following the entire value chain.

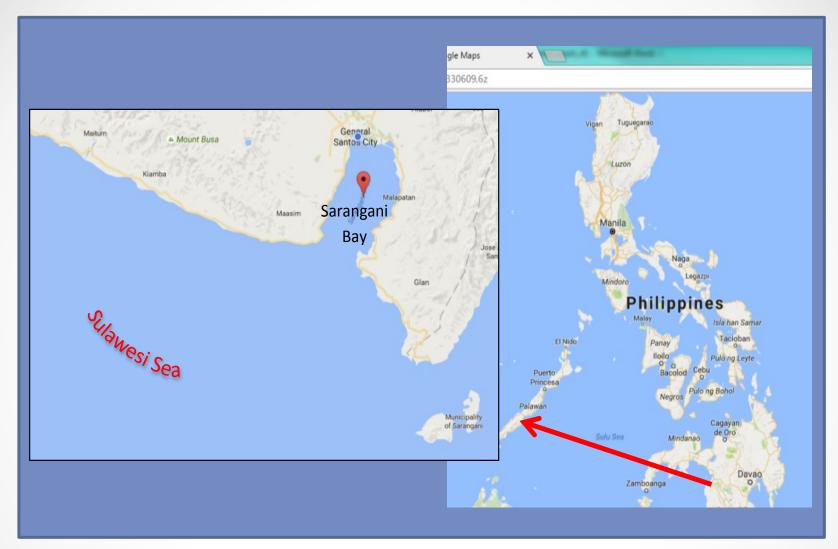


Figure 1. USAID Oceans General Santos City learning site.

### Objectives of this presentation

- to compare and contrast gender roles in the municipal and commercial tuna value chains in Sarangani, Philippines, with focus on the production and trading nodes of the chain
- to identify efforts toward sustaining tuna fisheries, particularly those that combat IUU
- to identify possible entry points for developing CDT schemes

#### **Methods**

Triangulation of primary and secondary data sources

### **Primary Data**

- direct observation
- key informant interviews
- focus group discussions

### **Secondary Data**

- sourced mainly from: BFAR 12, PFDA GenSan PSA, FAO

### **Value Chain Mapping**

key customers and requirements, key players & roles, product flow, gender role, opportunities and constraints for EAFM

### **Industry Profiling**

fishing grounds, production, product forms, exports, imports,

**Community Validation** 

### Nodes of the Tuna Value Chain Studied

Inputs and Services

Produc tion

Trade

Consumption

Pre-Fishing Activities

Municipal & Commercial Fishing

Distribution to Brokers, Exporters, Wholesalers, Retailers

Local, Domestic and International Consumption

Activities

- Fishing Assets Owners
- Fishing Supplies Providers
- Handline, Purse Seine & Ring Net Fishers
- Financiers/ Consolidators

- Middlemen
- Wholesalers
- Exporters
- Retailers
- Logistics Service Providers

- Local Consumers
- Consumers from other Phil. Regions
- Foreign Consumers

Individuals/ Industries Involved

### Inputs and Services

Pre-Fishing Activities

### Municipal Tuna Fishing Gender Roles

_					
	Activity	Wo	N	Girls	Boys
	Negotiating the borrowing of starting capital for the				<b>✓</b>
١	fishing trip from the community financier/consolidato P	re-fishing is	a family a	affair 🚄	
	Purchase or repair fishing gears	& unpaid me			
	Purchasing grocery items, ice, sinker stones and	do tasks t			
	the fishing trip	complemen		ier's	
	Preparing the provisions or "baon" for the fish	ta	sks		
	Loading fuel to the engine				<b>✓</b>
	Loading of sinker stones and gears				<b>V</b>
	Loading of provisions or baon and ice			<b>✓</b>	<b>~</b>
	Conducting ritual for a bountiful harvest and safety at		<b>✓</b>	<b>✓</b>	<b>✓</b>
	sea	V			
	Legend: ✓ Done by women, men, girls and boys, or only	•			
	Done mostly bywomen, men, girls or boys, wi		actors assis	sting	
	✓ ✓ ✓ Done exclusively by either women, men, girls	or boys			



"That means about 1 of three fishers are poor; of the 3, the 2 are municipal fishers – US!" cannot

### their fishing trips

- ➤ The fisheries sector is considered the second poorest sector in the country, with fishers at the poverty incidence of 34% in 2015 (PSA June 30, 2017).
- ➤ In the Sarangani study sites, 65.12% of the municipal fisher informants reported monthly incomes of PhP10,000 or less.



### Sources of Start Up Capital

### Municip fish financiers

- Interventions for the sustainability of fisheries trade must be linked with interventions to improve the
  - interventions to improve the condition of marginalized
  - condition of marginalized
- OWN players.
- consolidation ish ish ish ish become wholes increasing juvenile
  - ✓ dictate rices of fish, but not lower than to the first than the first than
  - cash advances > value of fish catch lead fishers deeper in debts: NO opportunity for selling catch at better prices

- n surplus funds; more women
  - mg activity
  - ores: provide fishing supplies
  - \_\_\_\_\_accessorie Declining fish catch
    - 1/3 of fish catch
- due to overfishing & degraded habitat; increasing juvenile
  - increasing juvenile catch

#### Inputs and Services

Pre-Fishing **Activities** 

### **Commercial Tuna Fishing Gender Roles**

#### **Handline Fishing**

	Activity	Women	Men
	Cleaning of fish vessel, fish holds/ice boxes, inspection and repair and maintenance of vessel, equipment and gadgets by piyado & fishing crew		<b>✓</b>
	Procuring supplies (food & water, laundry & bath soap, gasoline, diesel, LPG, medicines, ice, fishing supplies & replacement of depreciated gears, oil and lubricants, sinker stones, etc) and loading these to vessel	<b>✓</b>	<b>✓</b>
	Granting cash advances to boat captain and/or <i>piyado</i> , fishing crew	<b>✓</b>	<b>✓</b>
	Vessel sails to fishing ground (2 to 4 days) from the fish port, with 15-25 auxiliary boats		<b>4</b>

Legend:

Done by women and men

✓ ✓ Done exclusively by either women or men

### Inputs and Services

Pre-Fishing Activities

### **Commercial Tuna Fishing Gender Roles**

#### Purse Seine & Ring Net Fishing

Activity	Women	Men
Cleaning of fish vessel, fish holds/ice boxes, inspection and repair and maintenance of vessel, equipment and gadgets by piyado & fishing crew		<b>✓</b>
Procuring supplies (food & water, laundry & bath soap, gasoline, diesel, LPG, medicines, ice, fishing supplies & replacement of depreciated gears, oil and lubricants, and sinker stones, etc), and loading these to vessel	<b>✓</b>	<b>✓</b>
Granting cash advances to boat captain and/or <i>piyado</i> , fishing crew	<b>✓</b>	<b>✓</b>
Catcher vessel sails to fishing ground, HSP1, for 4 - 6 days with 3-5 light boats and carrier vessel		<b>4</b>

Legend:

Done by women and men

✓ ✓ Done exclusively by either women or men

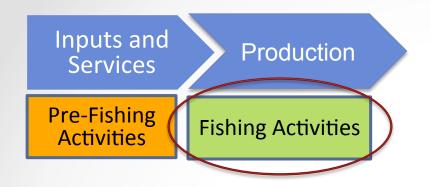
# Why financing is necessary in commercial fishing

- For handline fishing the cost of one trip
   ≈ USD10,000; 42% of operators have several fishing vessels
- For purse seine fishing, costs add up to USD764,949
- For ring net fishing, costs ≈ USD700,107

### Commercial fishing financiers

- they own the fish before these are landed
- some are owners of fishing vessels
- fish consolidation allows them to engage in fish trade and processing
- more men than women co the fishport

Some financiers are able to corner value added from input supply, production, processing and trade, indicating inequities



### Municipal Tuna Fishing Gender Roles

Activity	Women	Men	Girls	Boys
Catching small fish or squid for bait		<b>V</b>		<b>V</b>
Catching fish (tuna and other species)		<b>//</b>		<b>✓</b>
Placing fish catch inside icebox		<b>//</b>		<b>✓</b>
Unloading the fish catch in the community landing site	<b>✓</b>	<b>44</b>		<b>✓</b>
Bringing fish catch to the community financier	<b>✓</b>	<b>V</b>		<b>✓</b>

Legend:

Done by women, men, girls and boys, or only by two of the actors

✓ ✓ Done mostly bywomen, men, girls or boys, with 1 or 2 or 3 actors assisting

✓ ✓ ✓ Done exclusively by either women, men, girls or boys

Municipal fishery is generally multi-gear to be able to catch multi-species of fish... and recoup starting capital

- ✓ no women fishers as fishing is beyond municipal waters
- ✓ fishing vessel and gears used are considered as family-owned
- decisions are generally made by men and women:
  - renting of fishing vessel
  - borrowing of starting capital
  - use of income from fishing
  - safety at sea considerations

Inputs and Services Produ

**Activities** 

Production

Fishing Activities

### Commercial Tuna Fishing Gender Roles

**Activity** 

Catching of small fish and squid for bait

Offloading of auxiliary boats or pakura ar the pakura to about 1-2 miles away from catch tuna

Loading the tuna harvest to the mother the freezing this inside a fish holding ice box

Fishing is for 21 days; catching yellowfin (≥ 35 kgs) is done individually on board auxiliary boats).

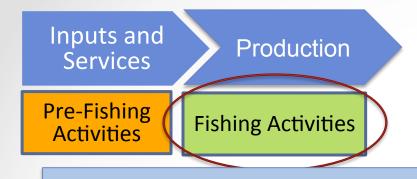
While fishing is done solely by men, 39% of the 233 handline fishing operators are women.

Repeating the process of tuna harvesting the mother boat for about 20 days or till the fish holds are filled up

Navigating back to the fish port

Unloading fish catch

Legend: 🗸 🗸 Done exclusively by either women or men



### Commercial Tuna Fishing Gender Roles

**Purse Seine and Ring Net Fishing** 

Purse seine: 9 months in the high seas (e.g., HSP1, WCPO)

Ring net: year-round fishing; but no fishing during bad weather

Navigating back to the fish port
Unloading fish catch to the fish port

	Women	Men
		<b>V V</b>
net setting		<b>V V</b>
ls		<b>V</b>
h the use of a		<b>V V</b>
olding ice boxes		
		<b>V</b>
		<b>//</b>

Legend: ✓ ✓ Done exclusively by either women or men

#### In commercial fisheries:

- ✓ ownership of fishing vessels and gears is either conjugal or as part of a business partnership
- decision-making making is male-dominated, led by boat captain
- ✓ married women operators are assisted by their spouses in decision making and in various fishport activities

Inputs and Services

Production

Trade

Pre-Fishing Activities

Fishing Activities

Distribution

### Municipal Tuna Fishing Gender Roles

Activity	Women	Men	Girls
Sorting and weighing fish delivered to financier or			
consolidator according to size and species	<b>4</b>	$\checkmark$	
Recording the volume of fish	<b>444</b>		
Pricing the fish based on info from fish buying stations	<b>4</b>	<b>✓</b>	
Tendering payment to fishers after deducting starting	<b>√</b> √	<b>✓</b>	
capital			
Packing fish in styro boxes		111	
Dispatch/deliver fish to brokers or wholesalers		111	
Receiving payment for fish	<b>//</b>	<b>✓</b>	
Selling fish to retailers	<b>4</b>	<b>✓</b>	
Retailing fish	<b>//</b>	<b>✓</b>	<b>✓</b>

Legend:

Done by women, men, girls and boys, or only by two of the actors

✓ ✓ Done mostly bywomen, men, girls or boys, with 1 or 2 or 3 actors assisting

✓ ✓ ✓ Done exclusively by either women, men, girls or boys

Inputs and Services

Production

Trade

Commercial Tuna Fishing Gender Roles

Pre-Fishing Activities

Fishing Activities

Distribution

#### **Handline Fishing**

Activity	Women	Men
Weighing of each of tuna caught, tagging of tuna in		
terms of number of kilos		<b>✓</b> ✓
Classifying or grading tuna catch into Class A, B or C		<b>V</b>
Bidding (offer price/kg secretly whispered to broker or	<b>✓</b>	$\checkmark$
consolidator)		
Recording volume of tuna catch, name of boat owner,	✓	$\checkmark$
price and class of each tuna caught		
Packing class B tuna for delivery to Cebu, Manila and		<b>V</b>
class A tuna for exports		
Dispatch tuna to brokers/wholesalers/importers	<b>✓</b>	$\checkmark$
Receiving payment (generally thru bank remittances) or	<b>✓</b>	<b>✓</b>
recording commitments to pay		

Legend:

Done by both women and men

Done exclusively by either women or men

Pre-Fis Activi Unloading, weighing, grading and packing of tuna makes more men than women involved.

e or Ring Net Fishing

		vomen	Men
Sor	Introduction of woman-friendly fish	<b>✓</b>	<b>✓</b>
We	weighing and packing technology and		<b>//</b>
Red		<b>✓</b>	$\checkmark$
naı	women training in grading can make		
Bid	gender roles more balanced.	<b>/</b>	<b>✓</b>
cor	n <mark>. The state of t</mark>		
Re	Cording price of tuna species caught according to size	<b>✓</b>	<b>✓</b>
Dis	patch tuna to brokers/wholesalers/processors	$\checkmark$	<b>✓</b>
Red	ceiving payment for fish or recording commitments to	<b>✓</b>	<b>✓</b>
pay	y .		

Legend:

✓ Done by both women and men

✓ ✓ Done exclusively by either women or men







**PORT** 



Unloading tuna



Man weighing tuna while woman does the recording

Tuna for sale at the fish port







**PORT** 



### Higher value-added/kg in the post-harvest nodes

	Fisher/Operator	Consolidator	Wholesaler	Retailer
Municipal fishery	18.60	25	.30	18.02
Commercial fishery				
Handline	47.18	49.74	70.45*	46.76
Purse Seine	1.30	16.44	34.04	21.02
Ring Net	1.76	14.01	34.04	21.02

<sup>\*</sup>shipped to Manila

### Note the following:

Advantageous to women?

Municipal: 2,000kgs/wk for consolidator vs. 80 kgs/2

days for retailers

Handline: 3.5MT/21 days for handline consolidator/

vessel vs. 200kg/2 days for retailer

### **Municipal Fishery**

# Familiarity with: **EAFM**

- ✓ heard of it in FARMCs, and from fish wardens, NGOs
- recognize the need for EAFM for sustainability
- wary that EAFM will compromise their welfare

### Familiarity with: Catch Documentation System

- consider stock assessment (NSAP) as CDT
- see FishR & BoatR also as CDT
- viewed as additional cost

### **Commercial Fishery**

# Familiarity with: EAFM



- Known by operators through fishers' organizations & from BFAR
- fishers' org'ns OK with closed season

### Familiarity with: Catch Documentation System

- seen as expensive by handliners
- ring netters have observers
- purse seiners haveVMS & an observer
- VCA results: VMS & observer expense ≈ 2.67% of production cost

### Men and Women in sustainable fisheries

### Municipal fishery

Activity/Process		
Membership in fisheries mgt bodies (FARMCs) and being deputized as fish wardens		
Membership in fisheries organizations and NGOs that work to conserve fisheries & aquatic resources	Ť	
Fishers Registration and Boat Registration; fisher wives facilitating the process	Ť	
Engaging in alternative livelihoods to reduce pressure on fishery and aquatic resources	Î	



# Men and Women engagements in sustainable fisheries

### **Commercial fishery**

Activity/Process	Î	
Compliance to BoatR and FishR, women facilitating the compliance	i	•
Respect for close fishing season (July-Sept)		
Submission of boat captain's report to PFDA/GSCFPC		
Adherence to the Observers' Program of BFAR (Purse seine and ring net operations)	i	
Use of Vessel Monitoring System for CDT (purse seiners)	i	
Fishers federation helping in initiatives to develop eCDTS appropriate to local conditions but meeting international requirements	i	*

# Entry points for developing eCatch Documentation and Traceability (CDT)

### Municipal fishery

- FishR and BoatR fishers can provide data (vessel and gears used, what they fish, where, and how, volume of catch)
- National Stock Assessment Program (NSAP)
   enumerators can recommend how to document
   fish catch not only in landing sites to reduce
   chances of entry of IUU fish catch

# **Entry points for developing eCatch Documentation and Traceability (CDT)**

### Municipal fishery

 Recording done by financiers/consolidators provides some documentation and traceability elements (date of landing, catch weight composition, species composition) but needs to include fishing grounds

# **Entry points for developing eCatch Documentation and Traceability (CDT)**

#### Commercial fisheries

- FishR and BoatR
- financier/consolidator's records
- Boat captain's report
- records of NSAP and PFDA
- use of GPS to identify fishing grounds
- use of VMS (purse seine fishing)
- observer's notes (purse seine and ring net fishing)

### **Gender in CDT**

- Women financiers/consolidators or their women staff play a vital initial role through recording to track sales and profits
- Women work on the FishR and BoatR while the men are at sea
- ✓ BFAR Observers' Program only for men
- ✓ Women more open to mechanisms for sustainable fisheries for livelihood security

# Synthesis of Gender Roles in the tuna value chain and CDT

- More women participation in the municipal VC
- ✓ Women involvement in the commercial VC more as frontliners and more in "small trade"
- Potential of establishing eCDT mechanisms found in FishR/BoatR processes and recording by financiers/consolidators

### Some ways forward

- Consider incentives for FishR/BoatR such as collaborating with government banks in the opening of a window for soft and scale-specific fishery financing for those compliant
- ✓ Collaborate with universities (e.g. via thesis/ dissertation of graduate students) on the development of an affordable and scale-specific eCDT using current critical data entries available

#### **ACKNOWLEDGMENTS**

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