

all hard and

*((((((()))))))

and fill filling



liv/100

MALLON

FM HANNILLEY

Technical Annexes to the



8/1))/

THE USAID OCEANS AND FISHERIES PARTNERSHIP

TABLE OF CONTENTS

Annex I. Survey of RAFMS Applications	2
Annex II. RAFMS Indicators and Variables	5
Annex III. Sample CDT Gap Analysis Survey Instrument	16
Annex IV. CDT Gap Analysis Diagnostic Tool	19
Annex V. Templates for Gender Analysis Research	21
Annex VI. Sample Questionnaire for Gender Analysis Surveys	23
Annex VII. Recommended Networks and Resources on Gender Equity	
REFERENCES	41

ANNEX I. SURVEY OF RAFMS APPLICATIONS

In developing this technical guidance, co-authors assessed several Rapid Appraisal for Fisheries Management Systems (RAFMS) applications as case studies. The following contains a brief description of these case studies and a summary of how they were used to inform the extended guidance.

Case Studies Reviewed:

- 1. The USAID Oceans and Fisheries Partnership Rapid Appraisals undertaken by the Partnership in Indonesia and the Philippines. USAID Oceans utilized several research methods/techniques (including value chain, gender, bioeconomic, and statistical analysis) in combination with the RAFMS methodology (see Summary Table below). The value chain analysis (VCA) was the most widely used in USAID Oceans' studies, complemented by Focus Group Discussions (FGDs), stakeholder workshops and four visual/participatory tools and techniques: flow charts, mapping, process charts, and timelines. The RAFMS results/outputs were used to developed site-based fisheries management plans, were instrumental in establishing increased scientific knowledge/understanding, aided in decision-making/policy-making, informed stakeholders as key informational materials, and were utilized in developing research agendas.
- 2. Examples from Small-Scale Capture Marine Fisheries Three examples were studied from several countries in the Asia-Pacific and African regions. Six other methods/techniques were used in combination with the RAFMS methodology: Participatory Diagnosis and Adaptive Framework (Andrew et al. 2007), Institutional Analysis and Development, VCA, biodiversity conservation measures, and marine protected area management effectiveness measures. FGDs and Key Informant Interviews (KIIs) were used in each, complimented by eight visual/participatory tools and techniques: calendars, decision trees, flow charts, mapping, process charts, timelines, transects, and Venn diagrams. RAFMS results/outputs were utilized for decision/policy-making, as information materials, to develop fisheries management plans, to identify actions for marine conservation and sustainable small-scale fisheries, and to support post-conflict livelihoods.
- 3. Web-Based Review of RAFMS Citations Over 100 citations of RAFMS applications were reviewed, wherein 11 of them directly utilized the RAFMS as a methodological guide (others cited RAFMS as a reference or part of literature review): Bangladesh (Chowdhury and Yakupitiyage 2000; Hossain et al. 2007, 2008; Das et al. 2009; Miah et al. 2015); India (Lobe and Berkes 2004); Indonesia (Pido et al. 1997; Garces et al. 2006, 2010); Philippines (Dela Peña et al. 2012); and Thailand (Boromthanarat et al. 2006). Out of this total, only six methodological uses of RAFMS were related to capture fisheries, specifically for the evaluation of community-level fisheries management systems in the Philippines and Indonesia (Pido et al. 1997); study of padu system of community-based fisheries management in terms of change and local institutional innovation in South India (Lobe and Berkes 2004); assessment of fisheries rehabilitation in post-tsunami Aceh, Indonesia (Garces et al. 2006); assessment of community needs and fisheries status in tsunami-affected communities in Aceh Province, Indonesia (Garces et al. 2010); assessment the status of coastal fishery resources in San Vicente, Palawan, Philippines (Dela Peña et al. 2012); and evaluation of status of coastal fisheries in Sitakunda Coast with special reference on climate change and fish catch (Miah et al. 2015).

Case Study Topic/Theme	Country	Complementary Methods	Data Collection	Use of Results	Source/Reference Citation
Catch documentation and traceability system in General Santos, Philippines Learning Site	Philippines	VCA	FGD, stakeholder workshop	• Planning/preparation of fisheries management plans	Cinco (2017), WorldFish (2017d)
RAFMS applications in General Santos, Philippines Learning Site		IAD, VCA	FGD, KII, stakeholder workshop	 Increased scientific knowledge/understanding Planning/preparation of fisheries management plans, research agenda 	Garces (2017a), Garces et al. (2013), WorldFish (2017a, 2017b, 2017c, 2017d, 2017e and 2017f)
Rapid appraisal in the context of tuna value chains		VCA	FGD, KII, HHI, stakeholder workshop	 Increased scientific knowledge/understanding Planning/preparation of fisheries management plans, research agenda 	Ramirez (2017), WorldFish (2017b)
Value chain mapping for Gender Analysis of the Fisheries Sector in General Santos, Philippines		Gender analysis, VCA	FGD, KII, HHI, stakeholder workshop	 Decision/policy-making Increased scientific knowledge/understanding Information materials Research agenda Planning/preparation of fisheries management plans 	Carolino (2017)
Gender Analysis in the Fisheries Sector in Bitung, North Sulawesi, Indonesia	Indonesia	Gender analysis, VCA	Checklist, FGD, KII, HHI, Stakeholder workshop	 Decision/policy-making Increased scientific knowledge/understanding Information materials Research agenda Planning/preparation of fisheries management plans 	Tumbol (2017)
Rapid appraisal for small pelagic fishery in Fisheries Management Area 716		Bioeconomic analysis, RA, statistical and mathematical analysis, stock assessment	FGD, KII, HHI, stakeholder workshop	 Decision/policy-making Increased scientific knowledge/understanding Planning/preparation of fisheries management plans 	Purwanto (2017a)
Rapid appraisal for tuna species in Fisheries Management Area 716		RA, statistical and mathematical analysis	FGD, KII, HHI, stakeholder workshop	 Decision/policy-making, Increased scientific knowledge/understanding Planning/preparation of fisheries management plans 	Purwanto (2017b)

Summary profile of USAID Oceans initiatives/components using RAFMS methodology (2015-2017)

Abbreviations: FGD - Focus group discussion, HHI - Household interview, IAD - institutional analysis and development, KII - Key informant interview, RA - risk assessment, VCA - value chain analysis

Case Study Topic/Theme	Country	Year	Complementary methods	Data Collection	Use of Results	Source/Reference Citation
Ecosystem Approach to small scale fisheries management in Misamis Occidental	Philippines	2011-2013	PDAM	FGD, KII	 Planning/preparation of fisheries management plans 	Garces et al. (2017b), Garces et al. (2013)
Design and Initiation of the Locally-Managed Marine Area (LMMA) Network	Pacific Islands Note: get list countries case studies	2001-2004	Biodiversity conservation measures; marine protected area management effectiveness measures	FGD, KII, HHI	 Information materials Planning/preparation of fisheries management plans 	Parks (2017a)
Promotion of Fisheries Co-management in Post- Conflict Liberia	Liberia	2011-2013	IAD, VCA	FGD, KII	 Decision/policy-making, Information materials Planning/preparation of fisheries management plans 	Parks (2017b)

Summary profile of selected case studies using RAFMS methodology

Abbreviations: FGD - Focus group discussion, HHI - Household interview, IAD - institutional analysis and development, KII - Key informant interview, PDAF - Participatory Diagnosis and Adaptive Framework (Andrew et al. 2007), RA - risk assessment, VCA - value chain analysis

Geographical location and thematic application of the methodological users of 1996 "A Handbook for Rapid Appraisal of Fisheries Management Systems (RAFMS, Version 1)"

Торіс	Bangladesh	India	Indonesia	Philippines	Thailand	Total
Capture fisheries	1	1	3	1		6
Ship scrapping workers	1					1
Aquaculture	2					2
Coastal zoning	1					1
Mangrove management					1	1
Total	5	1	3	I	1	11

Source: https://scholar.google.com.ph/citations?user=btW_UUQAAAAJ&hl=en

ANNEX II. RAFMS INDICATORS AND VARIABLES

This annex presents ecological, human, and governance indicators and variables to be used in the RAFMS process. This section can be used as a guide or "menu" of variables and indicators to be used in the RAFMS. Indicators can be collected during Steps One and Two of the RAFMS process to establish benchmarks and used after for Monitoring and Evaluation.

Attribute	Indicator	Measure	Scale
Fisheries/	Threatened fish species, listed by	 List of threatened fish species by category 	- Available: Yes=1, No=0
Biodiversity	relevant national and	- Identified list of fish species protected	- Available: Yes=1, No=0
	international agencies (e.g.	- Identified list of threatened fish species	- Available: Yes=1, No=0
	IUCN, CITES)	- Program for fish species protection	 Not available=0; Available = 1;
			Implemented=2
	Threatened other (non-fish)	- List of threatened other (non-fish) marine species by category	- Available: Yes=1, No=0
	marine species (protection) (e.g.	- Identified list of other marine species protected	- Available: Yes=1, No=0
	turtles, marine mammals, sea	- Identified list of threatened other marine species	- Available: Yes=1, No=0
	urchin, etc.), listed by relevant	- Program for other marine species protection	 Not available =0; Available = 1;
	national and international		Implemented=2
	agencies (e.g. IUCN, CITES)		
	By-catch/discards	 List of discarded or unwanted species 	- Available: Yes=1, No=0
		- Program to utilize by-catch	 Not available: N=0; Available = 1;
			Implemented=2
		- List of measures used on-board to reduce by-catch (e.g., TEDs)	 Not available: N=0; Available = 1;
			Implemented=2
	Community structure (species	Assuming data can be gathered from stock assessment (species by gear	
	diversity, composition) (data	and mean size)	
	from fisheries survey, transect	 List of species caught by gear types 	- Available: Yes=1, No=0
	survey)	- Species composition by gear types	- Decline N=0, Not Decline = I
		- Changes in spatial and temporal distribution of species by gear and by	 Smaller=0; Stable or Larger=1
		species/groups	

Ecological Well-Being indicators, measures, and scales

Attribute	Indicator	Measure	Scale
	Food webs/trophic interactions	Are you fishing apex predators?	
	= abundant base of primary species	- Decline in relative proportion/abundance/ contribution of predators vs. herbivores	- Decline =0, Not decline =1
		- Fishing mortality < 0.5 of natural mortality for forage fishery	- No=0, Yes=1
	Target species (including	- List of species by gear (municipal/commercial)	- Available: Yes=1, No=0
	indicator species for system	- Significant changes in species composition	- Yes=1, No=0
	health)	 Changes in spatial and temporal distribution and composition of species/groups 	- Smaller=0; stable or larger=1
		- Mean size of fish caught and changes in size compositions by gear type	- Smaller=0; stable or larger=1
	Maintaining reproductive	Assuming there is data:	
	capacity of target species	- Spawning potential ratio > 30% (NOAA, 2006).	- No=0, Yes=1
		- Length at first capture (Lc) > length at first maturity (Lm) Spawning	- No=0, Yes=I
		seasons and corresponding protection measures such as open and	
		closed fishing seasons	- No=0, Available=1, implemented=2
	Level of fishing effort	Trend of CPUE	
		- Et/Emsy <i< td=""><td>- No=O, Yes=I</td></i<>	- No=O, Yes=I
		- CPUEt/CPUEmsy>I	- No=O, Yes=I
		- CPUE by gear, vessel size, and fishing ground	 Available: No=0; Yes=1
		- MSY or MEY estimates and other reference points	- Available: No=0; Yes=I
Habitats	Protecting habitats	- List of MPA/refugia of MPA network and aerial extent within the FMA	- Available: Yes=1, No=0
(Mangrove,		- Programs that protect habitats	 Not available=0; Available = 1;
Seagrasses,		- Bans or other management measures over destructive fishing gears	implemented=2.
Corals, etc.)		(e.g., trawl bans), mesh size regulations, fishing zoning schemes, licensing regulations	 No=0; Yes=1; implemented=2
	Enhancing habitats	- Programs that enhance habitats	Not available=0; Available = 1;
		- Seeding programs, crab banks, No fishing zones	implemented=2.
	Managing for ecosystem	Are you managing for ecosystem resilience?	Not available =0; Available = 1;
	resilience	- Ecosystem resilience management plan	implemented=2
Water	Water quality	- Biological oxygen demand > ppm of seawater in the coastal area	- No=0, Yes=1
Quality		- Temperature	- No=0, Yes=1

Attribute	Indicator	Measure	Scale
		- Minimum dissolved oxygen > 3 ppm of seawater in the coastal area	- No=0, Yes=1
		- Eutrophication	- No=0, Yes=I
		- Heavy metals and hydrocarbon levels	- No=0, Yes=I
		- E-coli level < in the coastal area	
	Marine debris	- Program to reduce marine debris	- No=0, Yes=1
		- Program to reduce ghost fishing	- No=0, Yes=I

Human Well-Being Indicators and Measures

Attribute	Indicator	Measure	Actual Data or Ratings
Contribution to Macro-level Goals	Poverty Incidence in Fisheries (among fishing and fishery-dependent households)	 Change in real income of (fishing and fishery- dependent) households 	 Average income (in USD/year) of fishing and fishery- dependent households over time Poverty threshold levels (in USD/year) over time
	Seafood Security (food fish and other marine species)	 Volume of supply (consider seasonality/ catch rates), prices, and value of seafood harvested and traded over time Volume of demand (consider pop growth/ food pref.), prices, and value of seafood products consumed over time 	- Total volume (in mt/year), value (in USD/year), and price (in USD/mt) produced, consumed, imported, and exported for each major seafood species over time
		- Access to affordable seafood from sources outside the FMA	 Ratings: 0 – no access; I- w/ access w/in the country; 2- w/ access w/in the region; 3- w/ global access
	Seafood Safety (food fish and other marine species)	 Prevalence of IUU fishing Presence and compliance to guidelines on good fishing, handling and processing practices Status of seafood certification system (CS) Status of catch documentation and traceability system (CDTS) 	 Ratings: 0 – common; 1- around half; 2- minimal; 3- none Ratings: 0 – no guidelines; 1- w/ guidelines but minimal compliance; 2- moderate compliance; 3- high compliance Ratings: 0 – no CS; 1- w/ CS but not implemented; 2- partly implemented; 3- fully implemented

Attribute	Indicator	Measure	Actual Data or Ratings
		 Compliance to local/ national/ international seafood safety standards 	 Ratings: 0 – no CDTS; I- w/ CDTS but not implemented; 2- partly implemented; 3- fully implemented Ratings: 0 – zero compliance; I- minimal; 2- moderate; 3- high
Livelihood and Income Sources	Employment Rates in Fisheries (among fishing and fishery-dependent households)	 Number of employed (and unemployed) full- time/part-time men and women in fishery- related livelihoods over time Employment status & history of men and women in fishery Labor demand for and supply of men and women fishery industry workers 	 Total number of full-time/part-time employed, underemployed and unemployed men and women in specific fishery-related livelihoods over time Total number of fishery-related jobs for men and women and labor participation rate in fishery-related industries
	Household and Community Dependence to Fishery- Related Livelihoods	 Percent share of fishery-related income to total income (list of other sources of income of men and women and amount of income earned) Number of available job opportunities and types of jobs (fishery and non-fishery related) for men and women Educational levels by men and women and 	 Average income (in USD/year) of fishery-related and non-fishery-related income of households (among men and women) over time Total # of fishery-related and non-fishery-related job opportunities for men and women Average years of schooling and total # and types of
		 types/number of livelihood trainings completed Amount of government and private investments on fishery and non-fishery- related businesses and industries 	 training completed by men and women Total value (in USD/year) of government and private investments on fishery and non-fishery- related businesses and industries
	Presence of Alternative/ Supplemental Livelihoods	 Type/Number of livelihood trainings programs attended/completed by men and women Type/Number of alternative/supplemental livelihood programs participated by men and women Capacity (time and skills) of men and women to engage in supplemental livelihoods 	 Total number and types of livelihood trainings programs attended/completed by men and women Total number and types of alternative/supplemental livelihood programs participated by men and women Ratings: 0 – no training/experience; 1- minimal; 2- moderate; 3- high

Attribute	Indicator	Measure	Actual Data or Ratings
	Building Resilience of Fishing and Fishery-dependent Households	 Share to total household income of alternative/supplemental livelihoods of men and women Amount of government budget allocated and NGO programs for initiating and sustaining alternative/supplemental livelihoods Diversity in sources of income of fishery- dependent households including those engaged by men and women Adaptive capacity of men and women in fishery- dependent households against CC-related hazards, market shocks, and other external factors (e.g. in terms of social capital, networks/linkages among other industry players, among others) 	 Average income (USD/year) from main source of income and from alternative/supplemental sources of income of men and women Total value (in USD/year) of government budget allocated and number and types of private investments supporting alternative/ supplemental livelihoods Ratings: 0 - single; 1- many but all fishery-related; 2 - at least one major fishery-related and non-fishery related; 3- many and diversified Ratings: 0 - lack of network/social capital; 1- limited; 2-moderate; 3- strong
		 List of community-level and autonomous adaptation strategies available/practiced by men and women Government budget allocated for disaster preparedness and building resilience 	 Total number and types of community-level and autonomous adaptation strategies available/practiced by men and women Total value (in USD/year) of government budget allocated for disaster preparedness and building resilience
Access to Resources & Productive Assets	Tenure/access Rights of Fishing (and non-fishing?) Households	 Asset ownership (owned or rented) of men and women in fishing households Access to capital (owned or borrowed) used for fishing operations by men and women Percent share of fishing households (of men and women) with tenure/access rights Presence of policies and requirements related to tenure/access rights (e.g. land & water use maps, zoning, permits etc.) 	 Total number and types of assets owned or rented by men and women in fishing households Total amount (in USD) of capital owned or borrowed) used for fishing operations by men and women Total number fishing households (or men and women) with and without tenure/access rights Ratings: Yes, or No; if Yes, list current policies and requirements
	Resource Access of Indigenous People	 Number of men and women indigenous people engaged in fishery-related livelihoods 	 Total number of men and women indigenous people engaged in fishery-related livelihoods

Attribute	Indicator	Measure	Actual Data or Ratings
		 Percent men and women with access to fishery resources Presence of policies and requirements related to resource access 	 Total number of men and women indigenous people with and without access to fishery resources Ratings: Yes or No; if Yes list current policies and requirements
	Resource Use/Sharing Conflict	 Number/type of resolved and unresolved issues on resource use/sharing conflict Presence of resource use/sharing arrangements and systems Presence of policies supporting resource use/sharing (e.g. catch restrictions, land and water use maps, zoning) 	 Total number and types of resolved and unresolved issues on resource use/sharing conflict Ratings: Yes or No; if Yes, list resource use/sharing arrangements and systems Ratings: Yes, or No; if Yes list policies supporting resource use/sharing
Markets	Competitiveness of local fishery industry/market	 Volume, price, and value of fishery products produced and consumed over time Current and historical market type, structure, system, and market channels Number and type of men and women suppliers/producers and consumers of fishery products Observed market or value chain relationships and inefficiencies Access of fishery industry-dependent men and women to fair market information 	 Total volume (in mt/year), value (in USD/year), and price (in USD/mt) of produced and consumed of fishery products over time Information on market type, structure, system, and market channels Total number and types of men and women suppliers/producers and consumers of fishery products Information on market or value chain relationships and inefficiencies Ratings: 0 – no access; 1- limited access; 2- access from many sources; 3- access from many reliable sources
	Level of integration with broader (international) markets	 Volume, price, and value of fishery raw materials and products imported and exported over time Fishery products flow/mapping over time Productivity and profitability of operations of local industry players Changes in (international) policies & trade requirements/standards (e.g. CDT, quality, etc.) 	 Total volume (in mt/year), value (in USD/year), and price (in USD/mt) of imported and exported fishery raw materials and products over time Industry players & product flow/market maps Information on productivity and profitability List of (international) policies & trade requirements/standards over time

Attribute	Indicator	Measure	Actual Data or Ratings
Gender Equity/Equality	Equal/Equitable Benefit Sharing Among Industry Players	 Value addition/benefit of men and women from fishery products Roles of men and women in fisheries and relationship among industry players Access to fishery-related opportunities and equitable compensation Gender-sensitive working conditions Level of knowledge of men and women on fisheries policy Number of men and women in decision-making bodies (BFAR, OPAG, SAFFAI, fisher organizations) 	 Total value addition (in USD/mt) and benefits of men and women from fishery products List of roles of men and women in fisheries and relationship among industry players Ratings: 0 - no access; 1 - limited access; 2 - w/ access but inequitable; 3 - w/ equitable access Ratings: Yes or No; if No list issues/concerns Ratings: 0 - no knowledge; 1 - limited; 2 - high but unequal access; 4 - high and equal access Total # and of men and women in decision-making bodies and in key positions
Health	Diseases and illness	- Existing diseases and illness	- Number of affected community members
	Malnutrition	- Type of malnutrition	- Number of stakeholders who are malnourished

Governance Indicators and Measures

Attribute	Indicator	Measure	Level of Implementation
Institutional	Fisheries management office established and	Local or inter-governmental alliance, council,	0=no office
	operational	etc. established to cover FMA with women	I=local office
		members	2=coordination among local offices
			3=FMA wide coordination office
	Participation/co-management	Local stakeholders (men and women) for	0=no stakeholder participation
		fisheries management organized FMA-wide;	I=stakeholder organized
		actively participating in EAFM planning and	2=stakeholder consultation
		implementation	3=stakeholder/management partnership

Attribute	Indicator	Measure	Level of Implementation
	Institutional coordination and cooperation	Multi-institutional collaboration on	0=no coordination and cooperation
		management sustained (formalized as alliance,	I=local multi-institutional coordination
		council, etc.) with budget, staff, M&E	2= multi-local multi-institutional coordination
			3= FMA wide multi-institutional coordination
	Resources (sustainable financing and revenue	Business plan (with sharing of budget and	0=no resources
	generation)	revenues) to implement EAFM plan at FMA-	I=local finances
		scale	2=coordinated local finances
			3=FMA wide shared finances
	Capacity to do EAFM	There is a capacity building and development	0=no capacity building
		established to ensure all stakeholders have	I = local capacity building
		knowledge and skills to engage in EAFM	2=multi-local capacity building
			3=FMA wide capacity building
	Conflict management	There is a conflict management mechanism in	0=no conflict management
		place and operational	I=local conflict management mechanism
			2= multi-local conflict management
			mechanism
			3=FMA wide conflict management mechanism
Plans	Comprehensive EAFM plan adopted and regularly	EAFM plan for FMA adopted	0=no EAFM plan
	updated	and implemented	I=local EAFM plan
			2=coordinated local EAFM plan
			3=FMA EAFM plan
	Management boundaries of the FMA established	Fisheries management area waters delineated	0=no boundaries identified
		(map/chart prepared)	I = Ecosystem boundaries drawn and
			established
			2= Formal agreement on ecosystem
			boundaries
			3= Ecosystem boundaries legally recognized
			by the national government
	Multiple objectives	Set of multiple objectives to	0=no objectives
		deal with interactions within the fishery	I=one objective
		sector and with other sectors/users	2=multiple fisheries objectives

Attribute	Indicator	Measure	Level of Implementation
			3=multiple objectives on fisheries, ecosystem
			and human
	Clear outcome-based objectives	There are a set of objectives which are	0=no objectives
		internally consistent and acceptable through	I=objectives are set by government
		compromise with stakeholders.	2=objectives are set in partnership with
			stakeholders
Knowledge and	Program for knowledge, science and	New knowledge and information is being	0=no information program
Information	interdisciplinary information	gathered, analyzed and coordinated to	I=fisheries information program
		support EAFM	2=ecosystem information program
			3=EAF information program
Management	Precautionary approach	Decision makers are applying foresight to	Yes (1) No (0)
		deal with uncertainty in fisheries systems	
	Appropriate scale	Management is being undertaken at	I=management at spatial scale
		appropriate spatial, temporal and governance	2=management at governance scale
		scales for the ecosystem being managed	3=management at spatial, temporal and
			governance scales
	Fisheries management established with fishing	- FMA-scale fisheries monitoring and	0=no fisheries plan
	management plan and regulatory measures	management	I = local fisheries plan and fisheries profile
		- Inventory/characterization of Fleet/Gear	developed
		Fishing Technology	2=Fisheries regulations operational and
			monitoring conducted regularly and feedback
		- Level of Implementation of Regulation	to stakeholders and resource users
		- Species-specific management measures	3=Fisheries species-specific and gear specific
		- Gear specific management measures	regulations, FMA level monitoring used in
			fisheries management actions
	Fish registration and licensing system established	Registration and licensing system used to	0=no registration/licensing system
		regulate fishing effort at FMA-scale	I=registration/licensing system
	Coastal marine habitat management established	FMA-scale habitat monitoring and	0=no habitat management
		management	I=Local coastal marine habitat plan, baseline
			assessment conducted and habitat profile
			developed

Attribute	Indicator	Measure	Level of Implementation
			2=Coastal marine habitat monitoring
			conducted regularly and feedback to
			stakeholders and resource users
			3=FMA coastal marine habitat monitoring
			used in formulation of marine habitat
			management actions
	Coastal water quality management established	- FMA-scale water quality monitoring and	0=no water quality management
		management	I=Local water quality, baseline assessment
			conducted and water quality developed
		- Best Management Practices to control	2=water quality monitoring conducted
		land-based and at sea pollution	regularly and feedback to stakeholders and
			resource users
			3=FMA water quality monitoring used in
			formulation of water quality management
			actions
	Marine spatial planning to reduce conflict	Marine use zoning plan developed and	0=no Marine spatial planning (MSP)
		implemented	I = Fisheries and other marine uses identified
			and zoning plan developed
			2= marine use zoning plan implemented (with
			corresponding legal or policy instrument) and
			monitored
			3= marine use zoning plan improved,
			sustained and objectives attained (e.g. conflict
			reduced)
	Network of marine protected areas established	MPA network arrangements implemented,	0=no MPAs
		enforced and sustained	I = Individual MPA or MPAs established,
			baseline data collected, MPA management
			plan implemented, and monitoring system
			established
			2= Individual MPA or MPAs sustained and
			MPA network arrangements established

Attribute	Indicator	Measure	Level of Implementation
			3= MPA network arrangements implemented,
			enforced and sustained
	Adaptive management	Decision makers are systematically learning-	Yes (1) No (0)
		by-doing and test-learn-adapt management	
		actions and policies	
Enforcement and	Fisheries Law enforcement team and program	Fisheries law enforcement operations	0=no law enforcement
Compliance	established	regularly conducted over the FMA	I = Fisheries law enforcement team and law
			enforcement program established
			2= Fisheries enforcement operations
			regularly conducted and enforcement
			database established
			3= Fisheries enforcement operations
			sustained and enforcement effectiveness
			evaluated. Collaborative enforcement with
			other participating local governments
Law and Policy	Laws and policies supporting EAFM	National and/or local laws and policies	0=no laws/policies
		supporting the use of EAFM	I=laws/policies at local level
			2=laws/policies at national level
			3=laws/policies at national and local levels
	Establishment of port state measures	National legal framework for port state	Yes (1) No (0)
		measures	
Climate Changel	Plan and policies on climate change and disaster	Investment in adaptive capacity of men and	0=no climate change/disaster plan/action
Disaster	management/preparedness	women and resilient fisheries and coastal	I=climate change/disaster plan
		communities	2=climate change/disaster and actions
			3=investment in adaptive capacity and
			resilience interventions

ANNEX III. SAMPLE CDT GAP ANALYSIS SURVEY INSTRUMENT

Focus Group Discussion interview guides should be tailored for each specific stakeholder group interviewed. As such, the following sets of question guides are focused on thematic areas, to be used with relevant sets of respondents. For example, variables pertaining to fisheries management and IUU fishing can be administered to fisheries officers, resource users and managers, and community members.

Variables Set 1: ON FISHERIES MANAGEMENT AND IUU FISHING

Participants: Fisheries officers, resource managers and users; community members

Guiding Questions:

- I) What literature, publications, or reports are available on the fisheries profile (national and site level); structure (commercial and small-scale); fisheries production; major gears/species; number of vessels/fishers; socio-economic context; country map with major fishing areas/zones as well as fisheries management areas?
- 2) What national fisheries management legislation is in place, if any?
- 3) What are the major fisheries management issues (national and site level) pertaining to ecology and fisheries; socio-economic and human welfare; and governance, other, if any?
- 4) What are the fisheries management programs and the current status of fisheries Management and planning, including:
 - a. Management institutions (national and local), fisheries associations?
 - b. IUU measures and fisheries management interventions (licensing, seasonal/area closure, conservation of fish stocks, etc.)?
 - c. Strategies for combating IUU fishing? Is there a clear strategic objective to combat IUU? Is a CDT initiative used as one of the tools to combat IUU?
 - d. EAFM initiatives (site-level implementation and capacity building)?
- 5) Do you have available reports or information on fisheries management programs/projects (FMP) in the study area?
- 6) Are there indications that the fisheries resources are being overfished? Why?

Variables Set 2: ON CDT AND CDT TECHNOLOGY

Participants:

- Inspectors/verifiers/government authorities
- Fishing vessel/carrier vessel captain
- Fish buyers/middleman
- Processors/canners/
- Exporters
- Government fisheries agency representatives
- Resource managers and users
- Community members

Guiding Ouestions:

Existing CDT Status and Scheme

- I) Currently, is there a Catch Documentation and Traceability process applied in your country/company?
- 2) Do you have an electronic system for fishing vessel, fishing gear and fisher registrations and permits?
- 3) Does an electronic CDT system exist to collect, share and analyze verifiable ecological, economic, and social data related to seafood products as they move along the supply chain, such that they are traceable from point-of-harvest to seafood importer retail? If yes:
 - a. Is the CDT system being used by all players in seafood supply chain including fishers, buyers, processors, exporters, importers and government?
 - b. Does your CDT system support MCS? Do you use CDT system to collect fishery statistics?
 - c. Do you use the CDT system for stock assessment purposes particularly the point-of-harvest data or for spatial planning efforts, and harvest control rules?
 - d. Is the existing CDT system capable of robust reporting system and performing analytics on the data collected as a broader approach to marine ecosystem management?

- e. Does the existing CDT system analyze a set of Key Data Elements (KDE) and Critical Tracking Events (CTE) that will incorporate elements from existing reporting systems, regulatory requirements in import and export countries and the ASEAN ACDS?
- 4) Do you have other technological or computer-based systems being adopted to support a CDTS for the full, international seafood supply chain?
- 5) Do you have a port in/port out scheme?
- 6) Are all fishing vessel categories equipped with vessel monitoring systems (VMS) and being tracked for fishing?
- 7) Is there an effective landing declaration and inspection scheme?
- 8) Does a robust catch certification scheme exist?
- 9) Does an efficient health certification scheme exist?

CDT Institutional Support, Infrastructure and Enabling Environment

- 10) Is there a functional government infrastructure and superstructure of the existing traceability application and electronic system including hardware, software and personnel?
- 11) Do relevant regulations and laws that are related to CDT exist?
- 12) Are there existing or required manual input forms and supporting documents / certificates on CDT?
- 13) Is there an existing initiative, scheme, or program on CDT, such as FMP, MSC, etc.?
- 14) Are there existing market requirements and CDT drivers?
- 15) Are supporting infrastructure including connectivity available?
- 16) Are there any specific traceability requirements and practices for tuna value chain among small, medium and large-scale fisheries?
- 17) Is there appropriate technological infrastructure available?
 - a. Does IT and digital communication technology exist?
 - b. Are cell towers sufficient to cater to users?
 - c. Are cellular network services efficient?
- 19) Are CDTS data collection being done? How?
- 20) Are the fishers able to use electronic CDT technology?
- 21) Are there considerations on data storage and maintenance?
- 22) Are there concerns on data security?
- 23) Are there existing technology platforms from government agencies along the seafood supply chain? If so, is there data and agency interoperability?
- 24) Are data burden an issue, and if so, with whom?
- 25) Who is responsible in data collection?
- 26) Is avoidance of transition to eCDTS an issue?
- 27) Is transparency a big issue?
- 28) Are there established legal, policy or technical mechanism for collecting CDT data?
- 29) Is there any established mechanism on traceability?
- 30) Are there any regulatory limitations on eCDT?
- 31) Any regulations relevant to seafood traceability?
- 32) Any regulatory control on product movement like quota?
- 33) Is law Enforcement an issue?
- 34) Is there an existing MCS enforcement and eCDTS enforcement?
- 35) What is the most prevalent challenge in enforcing MCS?
- 36) What is the most prevalent challenge in enforcing CDTS?

KDEs, Standards, and Roadmap

- 37) Do any KDE or traceability standards exist?
- 38) Are these accepted traceability standards?
- 39) Do any international standard exist?
- 40) Are there existing management approach and customs clearance system? (e.g., single window, joint operation)
- 41) What data and management standards are used?
- 42) What certificate formats are used?
- 43) Are there data safeguards to avoid falsification?
- 44) Are unique identifiers used by fishing companies?
- 45) Are identifiers such as IMO being used?
- 46) Are existing Identifiers set by global standards?
- 47) Is there unified and coherent process and repository of unique identifier administration (both electronic and paper)

48) Is there an existing national ICT road map promoted in the country particularly on CDT?

Variables Set 3: ON PUBLIC PARTNERSHIPS

<u>Participants</u>: Government fisheries agency representatives, resource managers and users; community members

Guiding Ouestions

- I) Do you participate in multiple stakeholder engagement, including with government agencies, private fishing companies, fishing associations and groups, inter-governmental organizations, and NGOs from across the international seafood and information technology industries in the design, testing and implementation of eCDTS?
- 2) Are there existing intra-agency touch points?
- 3) Who are the existing, relevant information and communication technology providers?
- 4) Who are the existing, relevant associations, organizations, and research institutes?
- 5) What are the roles and responsibilities of government, private companies, NGOs on CDTS?
- 6) What is the current private sector and Industry partner support to government CDTS program/s?
- 7) What is the current participation of small-scale fishers in the CDTS program?
- 8) Others?

Variables Set 4: GENDER, HUMAN WELFARE AND LABOR

<u>Participants</u>: Government fisheries agency representatives, resource managers and users; community members

Guiding Questions:

- 1) Are there any gender and human welfare issues (including but not limited to labor abuses, human trafficking, forced labor) reported in the fishing industry?
- 2) Are there existing safe, legal and equitable labor practices and standards in the seafood industry? Please elaborate.
- 3) Does the existing CDT system include the collection of relevant labor data to monitor labor practices?
- 4) Do you believe that pressure from seafood buyers and the government will promote participation in the CDT system and bring about worker protection and voluntary compliance with labor standards?
- 5) Does the existing system show the actual costs of labor associated with fisheries operations?
- 6) Does the system allow workers to have access to enforcement and grievance mechanisms?

ANNEX IV. CDT GAP ANALYSIS DIAGNOSTIC TOOL

This diagnostic tool can be used to evaluate the CDT readiness of a country, its fisheries, as well as its fishing industry. This can be used as part of Focus Group Discussions or Key Informant Interview sessions during RAFMS process.

#	ITEM	RESPONSE
	CONCERNS	(Y/N/NA)
I	 Is IUU fishing a problem in this fishery? If "yes:" (a) Why is IUU fishing a problem? (b) Who are the responsible parties for the IUU fishing problem? (c) What forms of IUU fishing exist? (d) Is there any report or evidence that support this claim? If so, please explain. 	
	(e) How are these problems dealt with by the government/authorities and the private sector?(f) When did IUU fishing begin occurring?	
2	Is CDTS perceived as one of the solutions to combat IUU fishing problem on the fisheries?	
CA	TCH DOCUMENTATION CONCERNS	
3	Do you currently use a paper-based or electronic system to document fish catch (such as a fishing vessel logbook, catch certificate/document)?	
4	Do you have a port-in/port-out scheme to monitor fishing activity and legality of operations?	
5	Are some/all of your commercial fishing vessels equipped with VMS and being tracked by a system tracking for fishing?	
6	Is there an effective landing declaration and inspection scheme used at port?	
7	Does a robust catch certification scheme exist?	
8	Does an effective health certification scheme for fisheries exist?	
9	Are the required manuals, input forms and supporting documents/certificates available at	
10	different nodes of the supply chain? Are supporting infrastructures such cell towers/sites including internet/Wi-Fi	
10	connectivity currently available?	
11	Are there any specific traceability (internal and external) requirements and practices for	
	fisheries' value chains among small, medium and large-scale fisheries?	
12	Are unique identifiers used by fishing companies?	
	(a) Are identifiers such as IMO being used?	
	(b) Are existing identifiers set by global standards?	
13	Is enforcement of fishery laws an issue? Is there an effective MCS enforcement?	
14	Do any fisheries product traceability standards exist?	
	(a) Are these globally accepted traceability standards?	
	(b) Do any international standards exist per processing company?	
15	Are there data exchange protocols and agency inter-operability?	
	(a) Are there existing management approach and customs clearance system?	
	(b) What data and management standards used?	
	(c) What certificate formats are used?	
	(d) Are there data safeguards to avoid falsification	
CD	Γ CONCERNS	1
16	Currently, do you have a catch documentation and traceability system (CDTS)	
	implemented for your fishery product? If "yes:"	
	(a) Does the CDTS capture information related to the fishery product as it moves along all stages within the supply chain, from point-of-harvest to export? If	

	information is only captured at some/certain stages of the supply chain, identify	
	which ones.	
(b)	Is the CDT system being used by all players in seafood supply chain including	
(-)	fishers, buyers, processors, exporters, importers and government?	
(c)	Does your CDT system support MCS?	
	Do you use CDT system to collect fishery statistics?	
	Do you use CDTS for stock assessment purposes particularly the point-of-	
	harvest data or for spatial planning efforts?	
(f)	Is the exiting CDTS capable of robust reporting system and performing analytics	
	on the data collected as a broader approach to marine ecosystem management?	
(g)	Is sufficient technological infrastructure for the CDTS available? For example:	
(0/	are IT and digital communications used within the fisheries sector? Are there	
	sufficient cell towers to cater to all users? Is the cellular network service	
	efficient?	
(h)	Does other similar technology, being adopted, integrated to CDTS for full,	
	international seafood supply chain	
(i)	Is there a functional government infrastructure and/or superstructure of the	
	existing e-CDTS such as hardware, software and personnel or human	
	resources?	
(j)	Do relevant regulations and laws that are related to CDTS exist?	
(k)	Is there an existing initiative and/or scheme such as Fisheries Management	
	Program, Fisheries Information System (FIP), Fair Trade, Marine Stewardship	
	Council, etc. that governs program on CDT?	
(I)	Are there existing international market requirements and/or CDT drivers that	
	influence the development of eCDTS?	
(m)) Does the existing CDT system analyze a set of Key Data Elements (KDE) and	
	Critical Tracking Events (CTE) that will incorporate elements from existing	
	reporting systems, regulatory requirements in import and export processes?	
(n)	Are CDTS data collection being done? If so, how? (paper-based)? Are there	
	considerations on data storage and maintenance? Are there concerns on data	
	security?	
(0)	Is CDTS data transparency a big issue? Are there established legal, policy or	
	technical mechanism for collecting CDT data? Is there any established	
	mechanism on traceability?	
(P)	Are there any regulatory limitations on eCDT? Any regulations relevant to	
	seafood traceability? Any regulatory control on product movement like quota?	
(p)	Does eCDTS create a data burden? It is an issue, and if so, with whom?	

ANNEX V. TEMPLATES FOR GENDER ANALYSIS RESEARCH

The following questionnaires can be used to facilitate Gender Analysis Research. Source: WinFish, 2017

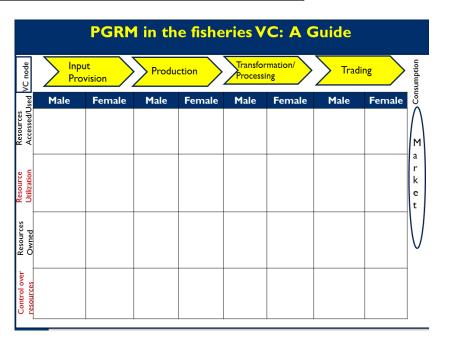
Template for Activity Analysis-

TIME & SPACE	For Time:			This temp			
	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:			informatio			
			processing, selling, trading) you mentio	oned? women an			
	For example: (Is it safe to as	sume that reproduct	ve tasks are home based)	on their			
	Time	Activities	Where done: home, work area, community	productive			
	4:00AM to 5:00AM		community				
	5:00AM to 6:00AM			reproduct			
	6:00AMto 7:00AM			community			
	7:00AM to 8:00AM			and leisure			
	8:00AM to 9:00AM			activities, v			
	9:00AM to 10:00AM			they are d			
	10:00AM to 11:00AM			-			
	11:00AM to 12:00NN			how much			
	12:00NN to 1:00PM			used for ea			
	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 basis but are being performed o		isks do you perform? May be not <u>on a</u> week?	daily			
	basis but are being periormed o	nce conce/united III a	WEEK.				

late can gather n from d men Э, ive, y work, e/rest when one, and time is ach.

Template for Participatory Gender Resource Mapping (PGRM) in the Fisheries Value Chain -

This template can be used to to identify and record the resources used, owned, and controlled by women and men along the value chain.



Template for Gender Responsive Value Chain Analysis –

This template can be used to identify and record the roles and actions of women and men along the value chain.

	Gender Differentials in VC Activities Gendered Value Chain Map							
VC node	Prov	it vision	Produc		Transfor Process	rmation/ ing		Consumption
	Male	Female	Male	Female	Male	Female	Male	Female
								м
vities								a r k
VC Activities								e
Ľ								
								V

Template for Gender Responsive Value Chain Analysis –

This template can be used to identify and record the opportunities and constraints of women and men along the value chain.

Di	Differentials in Opportunities/Constraints:				
OPPORTU	NITIES		CONSTR	AINTS	
<u>Male</u>	<u>Female</u>		<u>Male</u>	<u>Female</u>	
		Lrade			
		Tra			
		Trans-			
		form			
		Production			
		P ₂			
		Specific inputs			

ANNEX VI. SAMPLE QUESTIONNAIRE FOR GENDER ANALYSIS SURVEYS

The following questionnaires can be used to facilitate surveys with fishers and operators. It has been developed according to the domains of the USAID Gender Dimensions Framework. *Source: WinFish, 2017*

Set A: FISHE	RS AND	OPERATORS
		••••••

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? YesNo If answer is YES, proceed with the interview If answer is NO, terminate interview and replace respondent Socio- For respondent	Screening	I) May I know the nature of your work?			
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?YesNo 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:MaleFemale Highest educational attainment:No formal schoolingSome grade schoolGrade schoolGrade schoolGrade schoolHigh schoolHigh schoolHigh schoolNome collegeVocational schoolingCollege graduateCollege graduateCollege graduateCollege graduateCollege graduateCollege graduateCollege graduate	Questions	A - Captain of a fishing boat/vessel			
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? YesNo 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		B - Fisher			
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? YesNo 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		C - Crew/labor/worker of a fishing operation			
If respondents answered C, terminate interview and replace respondent 2) Do you fish for tuna?YesNo 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): Address (outside General Santos City): How many years have you lived in General Santos City?years Sex:MaleFemale Highest educational attainment:No formal schoolingSome grade schoolGrade schoolGrade schoolGrade schoolHigh schoolHigh schoolHigh schoolNone collegeVocational schoolingCollege graduateSome collegeVocational schoolingCollege graduateSome collegeVocational schoolingSome college					
2) Do you fish for tuna? YesNo 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					
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					
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:MaleFemale Highest educational attainment:No formal schoolingSome grade schoolGrade school graduateSome high schoolHigh school graduateSome collegeVocational schoolingCollege graduateSome collegeVocational schoolingCollege graduateSome collegeVocational schoolingCollege graduateSome collegeVocational schoolingSome collegeVocational schoolingSome collegeSome college					
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		If answer is YES, proceed with the interview			
demographics 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 Some college Vocational schooling Some college Vocational schooling Some college Vocational schooling College graduate		If answer is NO, terminate interview and replace 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	Socio-	For respondent			
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	demographics	What is your name:			
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		Address (in General Santos City):			
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		Address (outside General Santos City):			
Female Highest educational attainment: No formal schooling Some grade school Grade school graduate Some high school High school graduate Some college College graduate		How many years have you lived in General Santos City? years			
Highest educational attainment: No formal schooling Some grade school Grade school graduate Some high school High school graduate Some college College graduate		Sex: Male			
 No formal schooling Some grade school Grade school graduate Some high school High school graduate Some college Vocational schooling College graduate 		Female			
 Some grade school Grade school graduate Some high school High school graduate Some college Vocational schooling College graduate 		Highest educational attainment:			
 Grade school graduate Some high school High school graduate Some college Vocational schooling College graduate 		No formal schooling			
Some high school High school graduate Some college Vocational schooling College graduate		Some grade school			
 High school graduate Some college Vocational schooling College graduate 		Grade school graduate			
Some college Vocational schooling College graduate		Some high school			
Vocational schooling College graduate		High school graduate			
College graduate		Some college			
		Vocational schooling			
Post Graduate		College graduate			
		Post Graduate			

Civil Status:
Single
Married
Separated
Widow/Widower
Live-in
Ethnic group:
Bicolano
Cebuano-Bisaya
Ilocano
llonggo
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
llonggo
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 res	pondent only				
1.	How many perso	ns live in yo	our household	d?	
2.	Who among men operations? Ident spouse, son, gran	ify member	no. 2, in rela	tion to respon	dent (no. 1). (e.g.
	Household Members	Age	Sex		
	Members		Male	Female	_
	I. Respondent				
	2.				
	3.				
	4.				
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				
	11.				
	12.				
3.	What is your hou answer only)	usehold's m	ost importan	t/primary sourc	e of income? (One
	Fishing				
	Fish processin	Ig			
	Fish trading/se	elling			
	Farming				
	Profession				
	Remittance				
	Others, specif	-			
4.	What is your hou answer only)	ısehold's se	cond most in	nportant source	e of income? (One
	Fishing				
	Fish processin	g			
	Fish trading/se	elling			
	Farming				

	Profession
	Remittance
	Others, specify
	None
5.	Approximately how much do you earn per month from fishing? (One answer only; Note: amount in Philippine Peso or PHP, which is about USD0.019 as of 13 May 2018)
	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; Note: amount in Philippine Peso or PHP, which is about USD0.019 as of 13 May 2018)
	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

Organization	Organization Positions							
	President /Vice President	Secretary/ Treasurer	Other Officer Positio n	Member	None			
a) tuna industry associations								
b) processors industry associations								
c) fisherfolk association								
d) women fisherfolks organization								
e) Others, please specify:								
9. What other Please specif		ur communit	y are you :	a member o	of (non-fishing)?			
10. What is you	r position in	the fishing op	erations?					
Owner								
Boat Captair	n /Operator	of the fishing	vessel					
Owner-Ope	erator							
Officer								
Crew/Work	er/Pasahero							
II. What is the	size of your	fishing vessel	(main fishi	ng vessel)?				
<3 GT								
3-20 G ⁻	Г							
21-150	GT							
>I50 G	Т							
12. How many c	lays does the	e fishing boat	spend at s	ea?				
I day of	r less							
2-3 days	5							
4-7 days	S							
2-3 wee	ks							

	months
>	months
13. Is fishin	g boat/vessel registered with LGU/BFAR?
Ye	s No Don't know
lf yes, ir	whose name is it registered?
11	1ale Female Corporation
If a Co	poration, is the president of corporation male or female?
1	1ale Female
I4. How w	as the fishing boat obtained? (Multiple answers allowed)
Self-	financed
Bor	owed money from relatives/family/friends
Loa	n (specify lender e.g. bank, private individual)
Buy	er
By i	heritance
Gov	ernment Assistance
Nor	-government agencies
Oth	ers, please specify
I5. How di allowed	d you/fishing operator obtain your fishing gears? (Multiple answers)
Self	financed
	rowed money from relatives/family/friends
Loa	n (specify lender e.g. bank, private individual)
Buy	
	heritance
	ernment Assistance
	-government agencies
	ers, please specify
	bes the owner raise cash when needed for the fishing operations?
	e answers allowed)
Self-	financing, proceed to Question No. 18
Bor	row money from relatives/family/friends
Loa	n (specify lender, e.g. bank, private individual)
Buy	er
Oth	ers, please specify

	Don't know				
		er borrows money to supp orrowing? What is the sex			operations,
			Sex	(
	Position of responsi	Ma	le Fen	nale	
	a) Fisher/Operator				
	b) Spouse				
	c) Business Partner				
	d) Relative				
	e) Others, please sp	pecify:			
	18. How does the o answers allowed	wner recruit workers for I)	the fishing bu	siness? (Mu	ltiple
	Personal Cho	oice			
	Referrals				
	Advertiseme	nt			
	Internet				
	Others, plea	se specify			
	19. How fast can the	e owner recruit workers?	(one answer o	only)	
	Within a day	,			
	Within a wee	ek			
	Within a mo	nth			
	More than a	month			
		<pre>kers do you have in one fis nployment status?</pre>	hing operatio	n (indicate	number)?
			Indicate Number	Employn (check b	nent Status ox)
				Regular	Seasonal
M	len	18 yrs & above			
Y	oung Men	15 yrs to below 18 yrs			
V	Vomen	18 yrs & above			
Y	oung Women	15 yrs to below 18 yrs			
В	oys				
G	irls	below 15 yrs.			
Т	otal number of workers	s in one fishing operation			

21.	From whom do you get reliable info (Multiple answers allowed)	rmation o	n new fishin	g practices?						
	National government agencies									
	Local Government Units									
	Other fishers									
	Tuna industry association									
	Radio									
	TV									
	Internet									
	Others, please specify									
22.	From whom do you get reliable info	rmation o	n market pr	ices? (Multiple						
	answers allowed)									
	National government agencies									
	Local Government Units									
	Other fishers									
	Tuna industry association									
	Radio									
	TV									
	Internet									
	Others, please specify									
23.	Who is your primary/major buyer? F (Choose one only)	lease say	if they are n	nale or female.						
	Type of human	Sex]						
	Type of buyer	Male	Female	-						
	a) Wholesaler			_						
	b) Retailer			_						
	c) Wholesaler-Retailer			-						
	d) Processor			-						
	e) Consumer			-						
	f) Financier			1						
	g) Others, please specify			-						
24.	What percentage of the buyers you percentage) %	deal with	are women	? (indicate						
	· · · · · · · · · · · · · · · · · · ·									

	25. Who usually b	oring you	r tuna catch	to the bu	ıyer? (multi	ple ansv	vers allo	wed)		
						Check ox]			
	Men		18 yrs 8	2 above			-			
			-		0		_			
	Young M	en		o below I	8 yrs		_			
	Women		18 yrs 8	k above						
	Young W	/omen	15 yrs t	o below I	8 yrs					
	Boys		below I	5 yrs.						
	Girls		below I	5 yrs.						
							-			
-	26. How do you get your product to your buyer? (multiple answers allowed)									
	Transport	to retail	market							
			esale marke	t (fishing)	oort)					
			at landing s		,					
			-							
	27. Do you allow your buyers to get your fish on credit?									
	Yes No									
	If no, why not		.							
	l need the									
	l need the	cash for	everyday e	xpenses						
	Avoid risk	s of non-	payment							
	Difficulty o	of collect	ing debts							
	Others, pl	ease spec	cify							
	lf yes, what pe	ercentage	e of those y	ou allow c	redit to, ar	e wome	en?9	6		
PRACTICES &	28. In your fishing	operatio	on, who usu	ally perfo	rms the foll	owing?				
PARTICIPATION	Activities	Men	Women	Young Men	Young Women	Boys	Girls	N/A		
	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						
	éngine						
	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 obse	erver io	in the fishir	ng operatio	on (at sea)?		
	200 2000 4 1011 0000				(40 004)1		
	Yes						
	No						
	If no, proceed to	o Quest	ion No. 32	2.			
	30. If yes, how many	y observ	vers join th	e operatio	on?		
		Numb	er				
		INUITE					
	Men						
	Women						
	31. Who pays the fi	sh obse	rvers?				
	M						
	My compan	ıy					
	Others, ple	ase spe	cify				
	l don't kno	w					

		Do BFAR enun landing sites)?	nerato	rs/persor	nnel b	oard	your t	ooat	and docum	ient cato	ch (in
		Yes									
		No									
		If no, proceed t	to Que	estion No	o. 34.						
	33.	lf yes, how mar	ny enu	merators	boar	d you	r boat	t (in l	anding site	s)?	
			Num	iber							
		Men									
		Women									
	- If no, pro	Do you attend YesNo oceed to Quest no usually atten	o ion No	o. 35.							
							You	ng	Young		
	Activitie	S		Men Wor	men	Men	1	Women	Boys	Girls	
		ing (People's nization, LGUs, s)	,								
		nars/ Training ed to fishing									
	c) Com	munity meeting	s								
	d) Public fishing	c hearings relat g	ed to								
KNOWLEDGE, BELIEFS & PERCEPTIONS	(NO1	Based on your following stater TE: enumerator I or disagree, or th	nents? has to l	read each	sente	nce ar	nd ask	resp	-	•	
	Stater	ment				Agro	ee	Agr	ther ee nor agree	Disagro	ee
	-	en buyers offer omen	better	r prices tł	nan						
		'omen buyers a th than men bu		ier to dea	l						

Tuna is a migratory fish		c) Women buyers are more particular about quality of fish than men buyers Image: Comparison of the second seco	-							
LEGAL RIGHTS & 37. Are you aware of fisheries-related policies/laws? LEGAL RIGHTS & 37. Are you aware of fisheries-related policies/laws? Image: I		period bring good luck to fishing trip 36. I will read out statements and for each please say whether t false: (NOTE: enumerator to read each sentence and ask respondents)	-							
LEGAL RIGHTS & STATUS LEGAL RIGHTS & 37. Are you aware of fisheries-related policies/laws? IMAGE Image: Image			True	False						
of municipal waters		Tuna is a migratory fish								
LEGAL RIGHTS & 37. Are you aware of fisheries-related policies/laws? Image: A product of the listed laws.) Yes No										
Skipjack is a kind of tuna		The legal size for purse seine nets to catch tuna is 3 cm								
A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets I, 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 37. Are you aware of fisheries-related policies/laws? (NOTE: Interviewer must have working knowledge of each of the listed laws.) YesNo		The city government requires the registration of purse seine								
Pockets I, 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 & 37. Are you aware of fisheries-related policies/laws? STATUS (NOTE: Interviewer must have working knowledge of each of the listed laws.) YesNo		Skipjack is a kind of tuna								
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 & 37. Are you aware of fisheries-related policies/laws? STATUS (NOTE: Interviewer must have working knowledge of each of the listed laws.) YesNo		Pockets 1, 2 and 3 in the Western and Central Pacific Ocean								
LEGAL RIGHTS & 37. Are you aware of fisheries-related policies/laws? STATUS 37. Are you aware of fisheries-related policies/laws? (NOTE: Interviewer must have working knowledge of each of the listed laws.) YesNo		Union (EU) even without submission of catch logsheets								
STATUS (NOTE: Interviewer must have working knowledge of each of the listed laws.) YesNo										
(NOTE: Interviewer must have working knowledge of each of the listed laws.)YesNo		37. Are you aware of fisheries-related policies/laws?								
	STATUS	(NOTE: Interviewer must have working knowledge of each of the listed lav	vs.)							
If yes, what are these laws/policies that you are aware of? (NOTE: Respondent has to		Yes No								
spontaneously provide response and interviewer merely ticks off the law mentioned).		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.		If no, proceed to Question No. 38.								

		Check if re the law	esponde	ent men	tions
a)	The Philippine Fisheries Code of 1998				
b)	Revised Fisheries Code of 2015				
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 company you work in	se to the follo	owing a	bout th	e
			Yes	No	N/A
a) A	re you currently covered by SSS?				
b) A	re you covered by PhilHealth				
,	re there employees younger than 15 years o ompany?	ld in the			
d) D	o 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?					
	oes your company provide you with protect o do your work?	ive clothing			
j) D	oes your company provide you protective e	yewear			
k) Do you use hand gloves in handling tunal) Is your working area well ventilated?m) Is your work area well lighted?					
n) D	oes your fishing boat have safe sleeping quar omen?	ters for			
	omen				

		le counter	f work, hov rpart? Pleas the one th	e choos	e one	amon	g the th	ree st	-	
	Choice	Choices			Ans	Answer				
	Men ar	re paid mo	re than wo	men						
	Men ar same	nd Womer	n are paid tl	ne						
	Men ar	e paid less	than the v	omen						
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	Daugh	Daughter Sor		Other Male House membe	Fem ehold Hou		ale sehold
	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		Responde	ent Sp	ouse	Mal cow	e vorker	Fem cow er		N/A
	Purchase of fishin paraphernalia	ig gears/								
	Fishing area									
	Financing the fish operation	ing								
	Marketing of cate	h				1				
	Pricing									

						1 1				
	Timing of fishing operation									
	Hiring of workers									
	42. Are there any fisheries rel YesNo	ated-projec	cts/activitie	s in your c	ommunity?					
	43. If yes, to what extent are			fisheries re	lated-					
	projects/activities in your community?									
	Community Activities	Never	Some-	Often	Always	N/A				
			times							
	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 startin as you engage in both work and ho 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) (See Annex V for recording template).Aside from the tasks mentioned above, what other tasks do you perform? May be on a daily basis but are being performed once/twice/thrice in a week?									

ANNEX VII. RECOMMENDED NETWORKS AND RESOURCES ON GENDER EQUITY

This section contains links to women/gender groups, societies, organizations, and other collectives devoted (formally or informally) to promoting or highlighting women/gender roles, relationships and issue in aquaculture, fisheries, post-harvest, and aquatic conservation. Visit www.genderaquafish.org/discover-gaf/gaf-networks-and-resources/ for links to select resources below.

Asian Fisheries Society -

- Gender in Aquaculture and Fisheries Section <u>www.genderaquafish.org/gaf-section/</u>
- Gender/women, fisheries/aquaculture resources <u>www.genderaquafish.org/resources-</u> <u>3/asian-fisheries-society-genderwomen-and-fisheries-resources/</u>

African Network of Women in the Fisheries Sector - www.comhafat.org/en/reseaux.php?id=3

Australia's Women's Industry Network Seafood Community - www.winsc.org.au/

European Union –

- Women in Fisheries in the EU <u>www.epthinktank.eu/2013/10/14/women-and-fisheries-in-</u> <u>the-european-union/</u>
- Relevance of gender in the policy arena <u>www.eige.europa.eu/gender-</u> <u>mainstreaming/sectoral-areas/maritime-affairs-and-fisheries</u>
- European Network of Women's Organizations in Fisheries and Aquaculture <u>www.akteaplatform.eu/?lang=es; www.twitter.com/AKTEAwif</u>

FAO –

- Gender mainstreaming (Gender Programme) <u>www.fao.org/gender/gender-home/en/</u>
- FAO Fisheries and Aquaculture Department (gender, fisheries and aquaculture) <u>www.fao.org/fishery/topic/16605/en</u>
- FAO Regional Fisheries Livelihoods Programme for South and South East Asia

 <u>www.fao.org/fishery/rflp/en</u>

Women in Fisheries Network Fiji - www.womeninfisheriesfiji.org/

International Collective in Support of Fishworkers – www.icsf.net/en/yemaya.html

Mundus Maris, Sciences and Arts for Sustainability - www.mundusmaris.org/

OECD Wikigender - www.wikigender.org/index.php/Gender_and_Fisheries

Red Española de Mujeres en el Sector Pesquero (Spanish Network of Women in the Fisheries Sector) – <u>www.mapama.gob.es/en/pesca/temas/red-mujeres/</u>

SEAFDEC -

• Experts Workshop on Regional Approach for the Implementation of FAO Voluntary Guidelines for Securing Sustainable Small-scale Fisheries: Human Right-Based Approach and Gender-Equitability – <u>www.seafdec.org/download/report-of-the-expert-workshop-on-</u> regional-approach-for-the-implementation-of-fao-voluntary-guidelines-for-securingsustainable-small-scale-fisheries-human-right-based-approach-and-gender-equitability/

- Experts Workshop for Securing Sustainable Small-Scale Fisheries on Human Rights-Based Approach and Gender Equitability Issue – <u>www.seafdec.org/experts-workshop-securing-</u> <u>sustainable-small-scale-fisheries-human-rights-based-approach-gender-equitability-issue-</u> <u>organized/</u>
- Fish for the People Vol. 16 No. 2 (2018) www.repository.seafdec.org/handle/20.500.12066/1374

Secretariat for the Pacific Community (Women in Fisheries Information Bulletins) – <u>www.spc.int/coastfish/en/publications/bulletins/women-in-fisheries.html</u>

The National Network for Women in Fisheries in the Philippines - www.womeninfisheriesph.org

University of Stirling (Gender Issues in Aquaculture) – www.dfid.stir.ac.uk/dfid/gender/gender.htm

USAID -

- ADS Chapter 205 Integrating Gender Equality and Female Empowerment in USAID's Program Cycle – <u>www.usaid.gov/sites/default/files/documents/1870/205.pdf</u>
- Gender at USAID (presentation) <u>https://www.usaid.gov/sites/default/files/documents/1865/Gender_USAID.pdf</u>
- Gender Equality and Female Empowerment Policy <u>https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf</u>

USAID Oceans and Fisheries Partnership – <u>www.seafdec-oceanspartnership.org</u>

World Bank, FAO and IFAD Gender in Agriculture Sourcebook (Fisheries and Aquaculture Module – <u>www.siteresources.worldbank.org/INTGENAGRLIVSOUBOOK/Resources/Module13.pdf</u>

Women Leaders' Forum (Coral Triangle Initiative for Coral Reef, Fisheries and Food Security-CTI-CFF)/(Coral Triangle Center-CTC) – <u>www.coraltriangleinitiative.org/wlf</u>

WorldFish (Gender as a Cross-Cutting Theme) – <u>www.worldfishcenter.org/content/gender</u>

WSI (International Association for Women in the Seafood Industry) - www.wsi-asso.org

REFERENCES

CHAPTER ONE –

- Agbayani, R.F., D.B. Batticaloa, E.T. Quinitio and D.H. Tormon-West. 2013. Resiliency of small-holder fishfarmers to climate change and market prices in selected communities in the Philippines, pp. 171–179. *In* M.G. Bondad-Reantaso & R.P. Subasinghe, (eds.) Enhancing the contribution of small-scale aquaculture to food security, poverty alleviation and socioeconomic development, FAO Fisheries and Aquaculture Proceedings No. 31. Rome, FAO. 255 p. Available at https://repository.seafdec.org.ph/handle/10862/2212.
- Alder, J., Pitcher, T.J., Preikshot, D., Kaschner, K. and Ferriss, B. 2000. Rapfish estimates how good is good? Pages 136 - 182 in Pauly, D. and Pitcher T.J. (eds) Methods for assessing the impact of fisheries on marine ecosystems of the North Atlantic. Fisheries Centre Research Reports 8(2): 195 p. Available at <u>https://www.researchgate.net/publication/223138744_How_Good_is_Good_A_Rapid_Appraisal_Tec_hnique_for_Evaluation_of_the_Sustainability_Status_of_Fisheries_of_the_North_Atlantic</u>
- Andrew, N.L., C. Béné, S.J. Hall, E.H. Allison, S. Heck, and B.D. Ratner. 2007. "Diagnosis and Management of Small-scale Fisheries in Developing Countries." Fish and Fisheries 8 (3): 227 – 240. Available at <u>https://www.worldfishcenter.org/content/diagnosis-and-management-small-scale-fisheries-developingcountries</u>
- Boromthanarat, S., Z. Hossain, B. Chaijaroenwatana. 2006. Community-led Mangrove Rehabilitation: Experiences from Hua Khao Community, Songkhla, Thailand. Asia-Pacific Journal of Rural Development. 169 p. Available at <u>http://connection.ebscohost.com/c/articles/24655345/community-led-mangrove-rehabilitation-experiences-from-hua-khao-community-songkhla-thailand</u>
- Bunce, L. and R. Pomeroy. 2000. Socioeconomic monitoring guidelines for coastal managers in southeast Asia: SocMon SEA. World Commission on Protected Areas and Australian Institute of Marine Science. 82 p. Available at <u>https://www.researchgate.net/publication/263247439_Socioeconomic_Monitoring_Guidelines_for_Coastal_Managers_in_Southeast_Asia_SocMonSEA</u>
- Bunce, L. P. Townsley, R. Pomeroy and R. Pollnac. 2003. Socioeconomic manual for coral reef management. Australian Institute of Marine Science. 251 p. Available at <u>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1431.4362&rep=rep1&type=pdf</u>
- Campbell, J.R. 2001. Participatory Rural Appraisal as Qualitative Research: Distinguishing Methodological Issues from Participatory Claims. Human Organization. 60(4):380-389. Available at <u>http://sfaajournals.net/doi/abs/10.17730/humo.60.4.4bgnlmy60fkvq4r2?code=apan-site&journalCode=humo</u>
- Carolino. A. 2017. Value chain mapping workshop Gender Analysis of the Fisheries Sector in General Santos Area. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Chambers, R. 1980. Rapid rural appraisal: rationale and repertoire. Discuss. Pap. 155. Institute of Development Studies, Brighton, UK. Available at <u>http://www.parkdatabase.com/documents/download/1981_chambers_rapid_rural_appraisal_rationale_and_repertoire_3.pdf</u>

- Chambers, R. 1992. Rural Appraisal: Rapid, Relaxed and Participatory. Institute of Development Studies. IDS Discussion Paper 311. 68 p. Available at <u>https://www.ids.ac.uk/files/Dp311.pdf</u>
- Chambers, R. 1994a. Participatory Rural Appraisal (PRA): Analysis of Experience. World Development. 22(9): 1253-1268. Available at Available at https://www.sciencedirect.com/science/article/pii/0305750X94900302
- Chambers, R. 1994b. Participatory Rural Appraisal (PRA): Challenges, Potentials and Paradigm. World Development. 22(10): 1437-1454. Available at .com/science/article/pii/0305750X94900302
- Chowdhury, M.A, A. Yakupitiyage. 2000. Efficiency of oxbow lake management systems in Bangladesh to introduce cage culture for resource-poor fisheries. Fisheries Management & Ecology.10 p. Available at https://onlinelibrary.wiley.com/doi/pdf/10.1046/j.1365-2400.2000.00187.x
- Cinco, E. 2017. Catch documentation and traceability system in General Santos Area. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Collinson, M.P. 1981. The exploratory survey: content, method and detailed guidelines with farmers. Farm Syst. Newsl. 5.
- Conway, G. 1985. Agroecosystem analysis. Agric. Adm. 20: 31-35. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.473.7772&rep=rep1&type=pdf
- Conway, G. 1987. The properties of agroecosystems. Agric. Syst. 24: 95-117. Available at https://econpapers.repec.org/article/eeeagisys/v_3a24_3ay_3a1987_3ai_3a2_3ap_3a95-117.htm
- Cornwall, A. and G. Pratt. 2011. The use and abuse of participatory rural appraisal: reflections from practice. Agriculture and Human Values. 28(2):263–272. Available at <u>ftp://ftp.itc.nl/pub/pgis/PGIS%20Articles/The%20use%20and%20abuse%20of%20participatory%20rural%</u> 20appraisal%20-%20Cornwall%20Pratt.pdf
- Das, N.G., M.S. Hossain & M.S. Islam. 2009. Waterlogged Area as New Horizon for Aquaculture Development: A Golden Dream to the Rural Communities of Begumgonj, Noakhali. Bangladesh Journal of Marine Sciences and Fisheries.1(1): 47-62. Available at https://www.researchgate.net/profile/M_Shahadat_Hossain/publication/215792005_Waterlogged_Are a_as_New_Horizon_for_Aquaculture_Development_A_Golden_Dream_to_the_Rural_Communities s_of_Begumgonj_Noakhali/links/0046351824f6202ca8000000/Waterlogged-Area-as-New-Horizon_ for-Aquaculture-Development-A-Golden-Dream-to-the-Rural-Communities-of-Begumgonj-Noakhali.pdf
- Dela Peña, H. P., M.D. Pido, E.M.C.C. Ponce de Leon, M.A. M. de las Alas, J.G. Buenconsejo, Jr. and N.S.
 Parcon. 2012. Sustaining the coastal fishery resources in San Vicente, Palawan. BIMP-EAGA Journal for Sustainable Tourism Development. I (1) 33-46. Available at http://jurcon.ums.edu.my/ojums/index.php/j-sustainable-tourism/article/download/937/58;
 Ihttps://www.researchgate.net/publication/283664484_SUSTAINING_THE_COASTAL_FISHERY_RES
 OURCES_IN_SAN_VICENTE_PALAWAN
- Eriksson, H., Adhuri D.S., Adrianto, L., Andrew, N.L., Apriliani, T., Daw, T., Evans, L., Garces, L.R., Kamanyi, E., Mwaipopo, R., Purnomo, A.H., Sulu, R.J., Beare, D.J. 2016. An ecosystem approach to small-scale fisheries through participatory diagnosis in four tropical countries. Global Environmental Change, 36: 56–66. Available at

https://ore.exeter.ac.uk/repository/bitstream/handle/10871/20376/Eriksson%20et%20al.%20Accepted. %20Participatory%20diagnosis%20and%20adaptive%20management.docx?sequence=1

- FAO (Food and Agriculture Organisation). 1995. Code of conduct for responsible fisheries. 41 p. Rome, Italy. Available at <u>http://www.fao.org/3/a-v9878e.pdf</u>
- FAO. 2003. Fisheries management: the ecosystem approach. Technical Guidelines for Responsible Fisheries. Supplement 2. Rome. Available at <u>http://www.fao.org/3/a-i1146e.pdf</u>
- FAO. 2005. Putting into practice the ecosystem approach to fisheries. Available at <u>http://www.fao.</u> org/docrep/009/a0191e/A0191E00.htm
- FAO. 2007. Increasing the contribution of small-scale fisheries to poverty alleviation and food security. FAO Fisheries Technical Paper. No 481. Rome. Available at www.fao.org/docrep/009/a0965e/a0965e00.htm
- FAO. 2014. Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication. FAO: Rome. Garcia, S.M. and Cochrane, K.L. 2005. Ecosystem approach to fisheries: a review of implementation guidelines. ICES Journal of Marine Science 62(3): 311-318. Available at <u>http://www.fao.org/3/i4356en/l4356EN.pdf</u>
- Fox, P. 1986. A manual of rapid appraisal techniques for Philippine coastal fisheries: problem solving and project identification. Research Division, Bureau of Fisheries and Aquatic Resources, Quezon City, Philippines.
- Friends of the Nation. 2010. Report on Assessment of Fishing Grounds in the Nzema East and the Ahanta West Districts. Takoradi, Ghana: Friends of the Nation. 15 p.
- Garces, L.R., A. Tewfik, M.D. Pido, N. Fatan, D. Adhuri, N. Andrew, M. 2006. Fisheries rehabilitation in posttsunami Aceh: Status and needs from participatory appraisals. NAGA, WorldFish Center Quarterly. 29(3-4):19-30. Available at <u>https://www.worldfishcenter.org/content/fisheries-rehabilitation-post-</u> tsunami-aceh-status-and-needs-participatory-appraisals
- Garces, L.R., M.D. Pido, R.S. Pomeroy, S. Koeshendrajana, B. Iskandar Prisantoso, N. Ahmad Fatan, D. Adhuri, T. Raiful, S. Rizal, A. Tewfik and M. Dey. 2010. Rapid assessment of community needs and fisheries status in tsunami-affected communities in Aceh Province, Indonesia. Ocean & Coastal Management. 53: 69–79. Available at https://www.sciencedirect.com/science/article/pii/S096456910900163X
- Garces, L.R., M.L. Perez, A.C. Alolod, I.L.J. Buendia, L.S. Callanta, L.B. Santos III, P.J.B. Ramirez and M.D. Pido. 2013. Operationalizing the Ecosystem Approach to Small-Scale Fisheries Management in the Philippines: The Iligan Bay Alliance of Misamis Occidental. Asian Journal of Agriculture and Development. 10(2): 15-37. Available at <u>https://www.worldfishcenter.org/content/operationalizingecosystem-approach-small-scale-fisheries-management-philippines-iligan-bay</u>
- Garces, Ll. 2017a. RAFMS Applications in General Santos, Philippines Learning Site. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Garces, L. 2017b. Ecosystem Approach to small scale fisheries management in Misamis Occidental. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.

- Garcia, S.J., Allison, E.H., Andrew, N.L., Bene, C., Bianchi, G., de Graaf, G., Kalikoski, G.J., Mahon, R. and Orensanz, J.M. 2008. Towards integrated assessment and advice in small-scale fisheries: principles and processes. FAO Fisheries and Aquaculture Technical Paper No. 515. Rome, FAO. Available at http://www.fao.org/3/a-i0326e.pdf
- Hildebrand, P. 1981. Combining disciplines in rapid appraisal: The Sondeo approach. Agric. Adm. 8(6)423-432. Available at <u>http://www.participatorymethods.org/resource/combining-disciplines-rapid-appraisal-sondeo-approach</u>
- Holland, Jason. 2015. Rabobank: Seafood is world's most widely traded animal protein. Seafood Source. <u>http://www.seafoodsource.com/news/supply-trade/27854-rabobank-seafood-is-world-s-most-widely-traded-animal-protein</u>. March 18, 2015 (Accessed on 3 April 2017).
- Hossain, M.S., S.R. Chowdhury, M.A.T. Chowdhury. 2007. Integration of Remote Sensing, GIS and Participatory Approach for Coastal Island Resource Use Zoning in Bangladesh. Songklanakarin Journal of Social Science and Humanities. 22 p. Available at <u>http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.487.8651&rep=rep1&type=pdf</u>
- Howes, J. 1987. Rapid Assessment Techniques for Coastal Wetland Evaluation. Results of Workshop, 1-7 March 1987, Selangor, West Malaysia. Interwader Publ. 24.
- Kittinger, J.N. 2013. Participatory fishing community assessments to support coral reef fisheries comanagement. Pacific Science. 67(3):361-381. DOI: <u>http://dx.doi.org/10.2984/67.3.5</u>. Available at <u>http://www.bioone.org/doi/full/10.2984/67.3.5</u>
- Lamug, C.B. 1996. Participatory Appraisal and Planning for Community Based Management Of Coastal Resources: A Philippine Case Study. Paper presented in the 6th Annual Conference of the International Association for the Study of Common Property "Voices from the Commons" Berkeley, California, USA. 23 p.
- Lobe, K. and F. Berkes. 2004. The Padu System of Community-Based Fisheries Management: Change and Local Institutional Innovation in South India. Elsevier. Natural Resources Institute, University of Manitoba, 70 Dysart Road, Winnipeg, Man., Canada R3T 2N2. 11 p. Available at https://www.umanitoba.ca/institutes/natural_resources/canadaresearchchair/Kenton[1].Mar.Pol.04.pdf
- Mascarenhas, J., P. Shah, S. Joseph, R. Jayakaran, J. Devavaram, V. Ramachandran, A. Fernandez, R. Chambers and J. Pretty. 1991. Participatory rural appraisal. RRA Notes 13. International Institute for Environment and Development, London. Available at <u>https://www.iied.org/rra-notes-13-proceedingsbangalore-pra-trainers-workshop</u>
- Maine, R.A., B. Cam and D. Davis-Case, 1996. Participatory analysis, monitoring and evaluation for fishing communities: A manual. FAO Fisheries Technical Paper. No. 364. Rome. 142 p. Available at http://www.fao.org/3/a-w3596e.pdf
- McCracken, J., J. Pretty and G. Conway. 1988. An Introduction to rapid rural appraisal for agricultural development. Sustainable Agriculture Program, International Institute for Environment and

Development, London, UK. Available at <u>http://www.participatorymethods.org/resource/introduction-rapid-rural-appraisal-agricultural-development</u>

- McGregor, A. (2008) Wellbeing, poverty and conflict. WeD Policy Briefing 01/08. 4 p. Available at http://www.bath.ac.uk/soc-pol/welldev/research/bp/bp1-08.pdf
- Metillo, E.B., L.C.S. Castro, N.A. Bedoya, L.A. Jimenez, V.T. Quimpang, M.J. Segumpan, M. Mahinay and D.G.G. Bacaltos. 2004. Participatory Rural Appraisal I in the Coastal Ecosystem of Mt. Malindang, Misamis Occidental, Philippines. SEAMEO SEARCA, College, Laguna, Philippines. 134 p. Available at https://www.researchgate.net/profile/Ephrime_Metillo/publication/264783864_Participatory_Rural_Ap praisal_in_the_Coastal_Ecosystem_of_Mt_Malindang_Misamis_Occidental_Philippines/links/53ef33d9 0cf23733e812d048/Participatory-Rural-Appraisal-in-the-Coastal-Ecosystem-of-Mt-Malindang-Misamis-Occidental-Philippines.pdf
- Miah, M.N.U., M.M. Shamsuzzaman, A. Harun-Al-Rashid & P.P Barman. 2015. Present Status of Coastal Fisheries in Sitakunda Coast with Special Reference on Climate Change and Fish Catch. Aquaculture Research & Development. 5 p. J Aquac Res Development 2015, 6:9. Available at http://dx.doi.org/10.4172/2155-9546.1000362
- Parks, J. 2017a. Design and Initiation of the Locally-Managed Marine Area (LMMA) Network. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Parks, J. 2017b. Promotion of Fisheries Co-management in Post-Conflict Liberia. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Pauly, D., V. Christensen, J. Dalsgaard, R. Froese and F. Torres, Jr. 1998. Fishing down the food webs. Science, 279:860-863. Available at <u>http://www.seaaroundus.org/doc/Researcher+Publications/dpauly/PDF/2000/OtherItems/FishingDown</u> <u>AquaticFoodWebs.pdf</u>
- Pauly, D., V. Christensen, R. Froese and M.L. Palomares. 2000. Fishing down aquatic food webs. American Scientist, 88:46-51. Available at <u>http://www.seaaroundus.org/doc/Researcher+Publications/dpauly/PDF/2000/OtherItems/FishingDown</u> <u>AquaticFoodWebs.pdf</u>
- Pido, M.D., R.S. Pomeroy, M.B. Carlos and L.R. Garces. 1996. A handbook for rapid appraisal of fisheries management systems. ICLARM Educ Series No. 16, 82 p. Manila, Philippines. Available at https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systemsversion-1
- Pitcher, T.J. Rapfish, a rapid appraisal technique for fisheries, and its application to the Code of Conduct for Responsible Fisheries. FAO Fisheries Circular. No. 947. Rome, FAO. 1999. 47p. Available at http://www.fao.org/tempref/docrep/fao/005/x4175e/X4175E00.pdf
- Pitcher, T.J. and Preikshot, D.B. 2001. Rapfish: A Rapid Appraisal Technique to Evaluate the Sustainability Status of Fisheries. Fisheries Research 49(3): 255-270. Available at <u>https://www.researchgate.net/publication/222573557_RAPFISH_A_Rapid_Appraisal_Technique_to_E</u> valuate_the_Sustainability_Status_of_Fisheries

- Pitcher, T.J., Lam M.E., Ainsworth, C., Martindale, A., Nakamura, K., Perry, R.I., Ward, T. 2013. Improvements to Rapfish: a rapid evaluation technique for fisheries integrating ecological and human dimensions. J Fish Biol.83:865-889. Available at <u>https://www.ncbi.nlm.nih.gov/pubmed/24090552</u>
- Primavera, J. H, and R. F. Agbayani. 1997. Comparative strategies in community-based mangrove rehabilitation programs in the Philippines. In N. H. Phan, N. Ishwaran, T. S. Hoang, H. T. Nguyen, & S. T. Mai (Eds.), Community Participation in Conservation, Sustainable Use and Rehabilitation of Mangroves in Southeast Asia. Proceedings of the ECOTONE V, 8-12 January 1996, Ho Chi Minh City, Vietnam (pp. 229–243). Hanoi, Vietnam: United Nations Educational Scientific and Cultural Organisation; Japanese Man and the Biosphere National Committee; Mangrove Ecosystem Research Centre." Available at https://repository.seafdec.org.ph/handle/10862/420
- Purwanto. 2017a. Rapid appraisal for small pelagic fishery in Fisheries Management Area 716. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Purwanto. 2017b. Rapid appraisal for tuna species in Fisheries Management Area 716. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Ramirez. P. 2017. Rapid appraisal in the context of doing tuna value chains. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Rhoades, R.E. 1982. The art of the informal agriculture survey. Train. Doc. 1982-2. Social Science Department, International Potato Center, Lima, Peru. Available at <u>https://www.scribd.com/document/106286494/Art-of-the-Informal-Agriculture-Survey</u>
- Safina, C. 1995. The world's imperiled fish. Scientific American. 273(5):46-53. Available at http://www.safinacenter.org/files/Safina1995SciAm.pdf
- Sajise, P., M. Espaldon, L. Florece and C. Medina. 1990. Rapid rural systems appraisal (RRSA): diagnostic and design tool for upland development projects. Rainfed Resources Development Project, Department of Environment and Natural Resources, and Institute of Environmental Science and Management, Philippines.
- Shanner, W.W., P.F. Philipp and W.R. Schmehl. 1982. Farming systems research and development: guidelines for developing countries. Westview Press, Boulder, Colorado. Available at <u>https://academic.oup.com/ajae/article-abstract/65/2/463/54760?redirectedFrom=fulltext</u>
- Silvestre, G. and D. Pauly. 1997. Status and management of tropical coastal fisheries in Asia. ICLARM Conf. Proc. 53, 208 p. Available at <u>https://s3-us-west-</u> <u>2.amazonaws.com/legacy.seaaroundus/researcher/dpauly/PDF/1997/Books%26Chapters/StatusMngtTr</u> <u>opicalcoastalFisheries.pdf</u>
- Townsley, P. 1993a. A manual on rapid appraisal methods for coastal communities. Bay of Bengal Programme, Madras, India. Available at <u>http://www.arlis.org/docs/vol1/11799963/ad477e00.pdf</u>
- Townsley, P. 1993b. Training of Rapid Appraisal Teams; notes for trainers. FAO Fisheries Circular. No. 868. Rome, FAO. 1993. 115 p. Available at <u>http://www.chs.ubc.ca/archives/files/CHS0022.PDF</u>

- Townsley, P. 1996. Rapid rural appraisal, participatory rural appraisal and aquaculture. FAO Fisheries Technical Paper. No. 358. Rome, FAO. 1996. 109 p. Available at http://www.fao.org/docrep/006/W2352E/W2352E00.htm
- Tumbol, R. 2017. Gender Analysis in the Fisheries Sector in Bitung, North Sulawesi, Indonesia. A Paper Presented during the Writeshop for Crafting the Rapid Appraisal Guide/Annex for Ecosystem Approach to Fisheries Management (EAFM) and Catch Documentation and Traceability (CDT), 4-8 December 2017, Quezon City, Philippines.
- Walters, J. S., J. Maragos, S. Siar and A.T. White. 1998. Participatory Coastal Resource Assessment: A Handbook for Community Workers and Coastal Resource Managers. Coastal Resource Management Project and Silliman University, Cebu City, Philippines, 113 p. Available at <u>http://library.enaca.org/mangrove/publications/pcra_training_guide.pdf</u>
- USAID (United States Agency for International Development). 2012. Gender Equality and Female Empowerment Policy. Washington, DC, USA. 28 p. Available at <u>https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2017a. Fisheries Catch Documentation and Traceability in Southeast Asia: A Conceptual Overview. Bangkok, Thailand, 32 p. Available at <u>https://www.seafdec-oceanspartnership.org/resource/fisheries-catch-documentation-and-traceability-in-southeast-asia-a-conceptual-overview-cdt-101/</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2017b. Fisheries Catch Documentation and Traceability in Southeast Asia: Technical Concept and Specifications. Bangkok, Thailand, 65 p. Available at <u>https://www.seafdec-oceanspartnership.org/resource/cdt201/</u>
- WorldFish. 2017a. Rapid Appraisal of Fisheries Management Systems in the Philippines: The Capture Fisheries Profile of Sarangani Bay /Annex I. Los Baňos, Laguna. 36 p.
- WorldFish. 2017b. Rapid Appraisal of Fisheries Management Systems in the Philippines: Socio-Economic and Value Chain Component Report /Annex 2. Los Baňos, Laguna. 70 p. WorldFish. 2017c. Rapid Appraisal of Fisheries Management Systems in the Philippines: Fisheries Governance of Sarangani Bay-Celebes Seascape/Annex 3. Los Baňos, Laguna. 41 p.
- WorldFish. 2017d. Rapid Appraisal of Fisheries Management Systems in the Philippines: Preliminary Report on CDTS Gap Analysis in the General Santos City Learning Site /Annex 4. Los Baňos, Laguna. 58 p.
- WorldFish. 2017e. Rapid Appraisal of Fisheries Management Systems in the Philippines: Stakeholder Validation Workshop Report /Annex 5. Los Baňos, Laguna. 224 p.
- WorldFish. 2017f. Rapid Appraisal of Fisheries Management Systems in the Philippines: Final Integrated Report. Los Baňos, Laguna. 39 p.
- WWF-WAMPO (World Wide Fund for Nature-West Africa Marine Program Office). 2012.Participatory Rural Appraisal (PRA) Report: Cockle Harvesting Activity, Kartong, The Gambia. Gambia-Senegal Sustainable Fisheries Project (USAID/Ba Nafaa). Coastal Resources Center, University of Rhode Island, USA 19 p. Available at <u>http://www.crc.uri.edu/download/Cockle_PRA_Report.pdf</u>

CHAPTER TWO -

Biggs, S. 1989. Resource-poor farmer participation in research: a synthesis of experiences from nine national agricultural research systems. International Service for National Agricultural Research. The Hauge, The Netherlands. Available at http://ebrary.ifpri.org/cdm/ref/collection/p15738coll11/id/92

- Bunce L. and R. Pomeroy. 2000. Socioeconomic monitoring guidelines for coastal managers in southeast Asia: SocMon SEA. World Commission on Protected Areas and Australian Institute of Marine Science. 82 p. Available at <u>https://www.researchgate.net/publication/263247439_Socioeconomic Monitoring</u> <u>Guidelines_for_Coastal_Managers_in_Southeast_Asia_SocMonSEA</u>
- Bunce L., P. Townsley, R. Pomeroy and R. Pollnac. 2003. Socioeconomic manual for coral reef management. Australian Institute of Marine Science. 251 p. Available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.431.4362&rep=rep1&type=pdf
- FAO (Food and Agriculture Organization). 2003. The Ecosystem Approach to Fisheries. FAO Technical Guidelines for Responsible Fisheries: No. 4, Suppl. 2. Rome, FAO. Available at <u>http://www.fao.org/docrep/005/Y4470E/y4470e00.htm</u>
- McCracken, J., J. Pretty and G. Conway. 1988. An introduction to rapid rural appraisal for agricultural development. Sustainable Agriculture Program, International Institute for Environment and Development, London, UK. Available at <u>http://www.participatorymethods.org/resource/introduction-rapid-rural-appraisal-agricultural-development</u>
- Mikkelsen, B.1995. Methods for development work and research: a guide for practitioners. Sage Publications, London. Available at <u>http://agris.fao.org/agris-search/search.do?recordID=XF2015012894</u>
- Pido, M.D., R.S. Pomeroy, M.B. Carlos and L.R. Garces. 1996. A handbook for rapid appraisal of fisheries management systems (version 1). ICLARM Educ. Ser. 16, 85 p. <u>https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systems-version-1</u>
- Pitcher, T.J. Rapfish, a rapid appraisal technique for fisheries, and its application to the Code of Conduct for Responsible Fisheries. FAO Fisheries Circular. No. 947. Rome, FAO. 1999. 47 p. Available at http://www.fao.org/tempref/docrep/fao/005/x4175e/X4175E00.pdf
- Pitcher, T.J. and Preikshot, D.B. (2001) Rapfish: A Rapid Appraisal Technique to Evaluate the Sustainability Status of Fisheries. Fisheries Research 49(3): 255-270
- Pomeroy, R., R. Brainard, M. Moews, A. Heenan, J. Shackeroff, and N. Armada. Coral Triangle Regional Ecosystem Approach to Fisheries Management (EAFM) Guidelines. 2013. The USAID Coral Triangle Support Partnership, Honolulu, Hawaii. 74 p. Available at <u>http://www.reefresilience.org/wpcontent/uploads/Pomeroy-et-al.-2013-CT-Regional-EAFM-Guidelines.pdf</u>
- Sajise, P., M. Espaldon, L. Florece and C. Medina. 1990. Rapid rural systems appraisal (RRSA): diagnostic and design tool for upland development projects. Rainfed Resources Development Project, Department of Environment and Natural Resources, and Institute of Environmental Science and Management, Philippines.
- Schonhuth, M. and U. Kievelitz. 1994. Participatory learning approaches: rapid rural appraisal, participatory rural appraisal. Schriften. GTZ248. Robdorf. Available at

http://www.participatorymethods.org/resource/participatory-learning-approaches-rapid-rural-appraisal-and-participatory-appraisal

- Staples, D., Brainard, R., Capezzuoli, S., Funge-Smith, S., Grose, C., Heenan, A., Hermes, R., Maurin, P., Moews, M., O'Brien, C. & Pomeroy, R. 2014. Essential EAFM. Ecosystem Approach to Fisheries Management Training Course. Volume 2 For Trainers. FAO Regional Office for Asia and the Pacific, Bangkok, Thailand, RAP Publication 2014/13, 213 pp. Available at http://www.fao.org/3/a-i3780e.pdf
- Townsley, P. 1992. Rapid appraisal for small water bodies. ALCOM Rep. 11. FAO, Harare, Zimbabwe. Available at <u>http://www.fao.org/tempref/FI/CDrom/aquaculture/a0845t/volume2/docrep/008/ad780e/AD780E00.ht</u> <u>m</u>
- Townsley, P. 1993a. A manual on rapid appraisal methods for coastal communities. Bay of Bengal Programme, Madras, India. Available at <u>http://www.fao.org/tempref/docrep/fao/field/006/ad477e/ad477e00.pdf</u>
- Townsley, P. 1993b. Training of rapid appraisal teams: notes for trainers. FAO Fish. Circ. 868. Available at http://www.chs.ubc.ca/archives/files/CHS0022.PDF
- Walters, J.S., J. Maragos, S. Siar and A.T. White. 1998. Participatory Coastal Resource Assessment: A Handbook for Community Workers and Coastal Resource Managers. Coastal Resource Management Project and Silliman University, Cebu City, Philippines, 113 p. Available at http://oneocean.org/download/990118/frntmttr.pdf

CHAPTER THREE –

- Ajimal, K. 1985. Force Field Analysis A Framework for Strategic Thinking. Long Range Planning. 18(5): 55-60. Available at. <u>https://www.sciencedirect.com/science/article/pii/0024630185902018</u>
- Esguerra, S. et al. (in prep). Rapid appraisal to guide the design and implementation of catch documentation and traceability system in the Philippines.
- Gomm, M. and H. Brocks. 2009. PARSE. Insight. Deliverable D 4.1. Specification of gap analysis schema and tool support.
- Hellin, J. and Meijer, M. 2006. Guidelines for Value Chain Analysis. Food and Agriculture Organization of the United Nations (FAO), Rome, Italy.
- Kaplinsky, R. and M. Morris. 2001. A Handbook for Value Chain Research http://asiandrivers.open.ac.uk/documents/Value_chain_Handbook_RKMM_Nov_2001.pdf
- Kumar, S. 1999. Force field analysis: Applications in PRA. PLA Notes. 36:17–23. Available at http://pubs.iied.org/pdfs/G01849.pdf
- Lewin, K. Force Field Analysis. Available at https://www.mindtools.com/pages/article/newTED_06.htm
- Pido M.D., R.S. Pomeroy, M.B. Carlos, and L.R. Garces. 1996. A handbook for rapid appraisal of fisheries management systems (version 1). ICLARM Educ. Ser. 16. 85 p. Available at <u>https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systems-version-1</u>

- Pido, M.D., R.S. Pomeroy, L.R. Garces and M.B. Carlos. 1997. A rapid appraisal approach to evaluation of community-level fisheries management systems: Framework and field application at selected coastal fishing villages in the Philippines and Indonesia. Coastal Management, 25: 183-204. Available at https://www.tandfonline.com/doi/abs/10.1080/08920759709362317
- Siriraksophon, S., Kawamura, H., and Imsamrarn, N. 2016. Securing the Niche of ASEAN Fish and Fishery Products in the Global Market: ASEAN Catch Documentation Scheme for Marine Capture Fisheries. Fish for the People, Volume 14 Number 2: p. 24-33 (Special Issue). Southeast Asian Development Center, Bangkok, Thailand. Available at <u>http://www.seafdec.org/download/fish-people-volume-14-no-2/</u>
- Swanson, D. J. and A. Shawn Creed. 2014. Sharpening the Focus of Force Field Analysis. Journal of Change Management, 14(1): 28-47. Available at <u>https://www.researchgate.net/publication/263685472_Sharpening_the_Focus_of_Force_Field_Analysis</u>
- Thomas J. 1985. Force Field Analysis: A New Way to Evaluate Your Strategy. Long Range Planning. 18 (6): 54-59. Available at <u>https://www.sciencedirect.com/science/article/pii/0024630185900640</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2017a. Fisheries Catch Documentation and Traceability in Southeast Asia: A Conceptual Overview. Bangkok, Thailand, 32 p. Available at <u>https://www.seafdec-oceanspartnership.org/resource/fisheries-catch-documentation-and-traceability-in-southeast-asia-a-conceptual-overview-cdt-101/</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2017b. Fisheries Catch Documentation and Traceability in Southeast Asia: Technical Concept and Specifications. Bangkok, Thailand, 65 p. Available at <u>https://www.seafdec-oceanspartnership.org/resource/cdt201/</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2018a. CDT Gap Analysis and Partnership Appraisal for Malaysia. Bangkok, Thailand, 97p. Available at: <u>https://www.seafdec-</u> <u>oceanspartnership.org/resource/vietnam-cdt-gap-analysis-and-partnership-appraisal/</u>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2018a. CDT Gap Analysis and Partnership Appraisal for Vietnam. Bangkok, Thailand, 38p. Available at: https://www.seafdecoceanspartnership.org/resource/malaysia-cdt-gap-analysis-and-partnership-appraisal/
- WorldFish. 2017. CDTS gap analysis in the Sarangani Bay-Sulawesi Sea learning site. Rapid Appraisal of Fisheries Management Systems in the Philippines. USAID Oceans and Fisheries Partnership Subcontract No. Tetra Tech – WF – 1084 – 001. Available at <u>https://www.seafdecoceanspartnership.org/wp-content/uploads/USAID-Oceans_Stakeholder-Validation-Workshop-Proceeding_Philippines_final_LR.pdf</u>

CHAPTER FOUR -

- ACDI/VOCA. 2012. Gender Analysis, Assessment and Audit Manual & Toolkit. ACDI/VOCA. 88 p. Available at http://www.acdivoca.org/wp-content/uploads/2016/07/ACDI-VOCA-Gender-Analysis-Manual.pdf
- Andraos, N. 2015. Toolkit for Compliance with USAID Policy on Gender Equality. Social Impact, Inc., Arlington, VA, USA. 30 p. Available at <u>http://www.fao.org/docrep/014/ba0004e/ba0004e00.pdf</u>

- Arenas, M.C. and A. Lentisco. 2011. Mainstreaming gender into the project cycle management in the fisheries sector. FAO RAP Publication 2011/15. Bangkok, Thailand. 105 p. Available at http://www.fao.org/docrep/014/ba0004e/ba0004e00.pdf
- BFAR (Bureau of Fisheries and Aquatic Resources). 2014. Philippine Fisheries Profile 2014. Bureau of Fisheries and Aquatic Resources, Department of Agriculture. 70 p. Available at https://www.bfar.da.gov.ph/files/img/photos/2014FisheriesProfile(Finalcopy).pdf
- BFAR (Bureau of Fisheries and Aquatic Resources). 2015. Philippines Fisheries Profile 2015. Bureau of Fisheries and Aquatic Resources, Department of Agriculture. 70 p.
- BCAS (Bitung Central Agency of Statistics). 2014. Bitung in Figures 2014. Bitung Central Agency of Statistics, Bitung City, Indonesia.
- CWFS (Committee on World Food Security). 2015. Making a Difference in Food Security and Nutrition, Final Report of the 42nd Session, 12-15 October 2015. CFS 2015/42 Report. Rome, Italy. 23 p. Available at http://www.fao.org/3/a-mo943e.pdf
- FAO. 2017. Towards gender-equitable small-scale fisheries governance and development A handbook. In support of the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication, by Nilanjana Biswas. Rome, Italy. Available at <u>http://www.fao.org/3/a-i7419e.pdf</u>
- Gopal, N., Williams, M.J., Porter, M. and Kusakabe, K. 2016. Gender in Aquaculture and Fisheries: The Long Journey to Equality. Asian Fisheries Science Special Issue. 29S: 1-17. Available at <u>http://www.fao.org/3/a-mo943e.pdf</u>
- Hilly Z., Schwarz A.-M. and Boso, D. 2012. Strengthening the role of women in community-based marine resource management: lessons learned from community workshops. SPC Women in Fisheries Information Bulletin 22 (July 2012): 29–35. Available at <u>http://pubs.iclarm.net/resource_centre/WF-3896.pdf</u>
- IGWG. 2016. Defining Gender and Related Terms. Interagency Gender Working Group, USAID. <u>https://www.igwg.org/wp-content/uploads/2017/05/DefinGenderRelatedTerms.pdf</u> (accessed July 2016).
- Israel, L. 1993. Women in the fisheries sector: A review of literature. Lundayan, Volume 2(2). Tambuyog Development Center.
- Israel, D.C. and R.M.G.R. Roque. 2000. Analysis of fishing ports in the Philippines. Discussion Paper Series No. 2004-04, Philippine Institute for Development Studies. Available at https://dirp4.pids.gov.ph/ris/dps/pidsdps0004.pdf
- Kabeer, N. 1994. Reversed Realities: Gender hierarchies in development thought. London: Verso, 346 p. Available at <u>https://searchworks.stanford.edu/view/2897164</u>
- Kantor, P., Miranda, M., and Choudhury, A. 2015. Amplifying Outcomes by Addressing Inequality: The Role of Gender-transformative Approaches in Agricultural Research for Development. Gender, Technology and Development. 19(3): 292-319. DOI: 10.1177/0971852415596863
- Kleiber, D., Harris, L.M. and Vincent, A.C. 2014. Improving Fisheries Estimates by Including Women's Catch in the Central Philippines. Canadian Journal of Fisheries and Aquatic Sciences. 71(5): 656-664. Available at http://www.nrcresearchpress.com/doi/abs/10.1139/cjfas-2013-0177#.WvmhZWpuYoA

Kleiber, D. 2015. Gleaning. http://www.genderaquafish.org/discover-gaf/gaf-networks-and-resources/gleaning/

- Kleiber, D., Harris, L.M. and Vincent, A.C. 2015. Gender and small-scale fisheries: a case for counting women and beyond. Fish and Fisheries. 16: 547-562. Available at <u>https://onlinelibrary.wiley.com/doi/abs/10.1111/faf.12075</u>
- Koehler, G. 2016. Tapping the Sustainable Development Goals for progressive gender equity and equality policy? Gender & Development. DOI: 10.1080/13552074.2016.1142217.
- Krushelnytska, O. 2015. Toward Gender-Equitable Fisheries Management in Solomon Islands. A synthesis report from a study by Barclay, Payne and Mauli, 2015. Available at <u>http://documents.worldbank.org/curated/en/467721468187800125/Toward-gender-equitable-fisheries-management-in-Solomon-Islands</u>
- Legaspi, A. 1995. Role of women in fisheries development in the Philippines. Final report of the Regional workshop on the Role of Women in Fisheries Development, GOP-UNDP SU/TCDC-TCCP.
- March, C., I. Smyth and M. Mukhopadhyay. 1999. A Guide to Gender Analysis Frameworks. Oxfam, Great Britain. 146 p. Available at <u>https://policy-practice.oxfam.org.uk/publications/a-guide-to-gender-analysis-frameworks-115397</u>
- Mayoux, L. and G. Mackie. 2008. A practical guide to mainstreaming gender in value chain development. International Labour Organization – Addis Ababa, Ethiopia. 113 p. Available at http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/instructionalmaterial/wcms_106538.pdf
- MMAF (Ministry of Marine Affairs and Fisheries). 2009. Strategic Plan of the Ministry of Marine Affairs and Fisheries 2009-2014. Ministry of Marine Affairs and Fisheries, Jakarta, Indonesia.
- MMAF (Ministry of Marine Affairs and Fisheries). 2014. Marine and Fisheries in Figures. Ministry of Marine Affairs and Fisheries, Jakarta, Indonesia. Available at http://www.fao.org/figis/pdf/fishery/facp/IDN/en?title=FAO%20Fisheries%20%26%20Aquaculture%20-%20Fishery%20and%20Aquaculture%20Country%20Profiles%20-%20The%20Republic%20of%20Indonesia
- Moser, C.O.N. 1993. Gender Planning and Development: Theory, Practice and Training. London: Routledge. 285 p. Available at <u>https://www.taylorfrancis.com/books/9781134935383</u>
- Pavo, R.R. and Digal, L.N. 2017. Women's Space in the Fish Port Tambler Complex and the Value-Chain Nodes of the Fishing Industry in General Santos City, Philippines. Asian Fisheries Science. 30S:33-58. Available at https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1163&file=Y0dSbUx6QTFOREE https://www.asianfisheriessociety.org/publication/commons.pdf https://www.asianfisheriessociety.org/publication/commons.pdf https://www.asianfisheriessociety.org/publication/commons.pdf https://www.asianfisheriessociety.org/publication/commons.pdf <a href="https://www.asianfis
- Pido, M.D., R.S. Pomeroy, M.B. Carlos and L.R. Garces. 1996. A handbook for rapid appraisal of fisheries management systems (version 1). ICLARM Educ. Ser. 16, 85 p. Available at https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systemsversion-1

- Rao, A., M.B. Anderson and C.A. Overholt. 1991. Gender analysis in development planning: a case book. West Hartford, Connecticut, Kumarian Press. 103 p. Available at <u>https://www.popline.org/node/338985</u>
- Rodriguez, L. 1996. The fishes of Talangban: Women's roles and gender issues in community-based coastal resources management." In Ferrer, E.M., de la Cruz, L. & Domingo, M.A. (Eds.) Seeds of Hope. UP: CSWCD. Available at https://idl-bncidrc.dspacedirect.org/bitstream/handle/10625/15827/104783.pdf?sequence=1
- Satapornvanit, A.N., A. Sermwatanakul, K. Naksung, K. Sochivi, T.H. Minh, T.K.Q. Nguyen, D. Yuan, and N. Gopal. 2016. Women in Aquaculture. International Collective for Small-scale Fishworkers Yemaya 51:4-6.
- Seymour, Greg; Malapit, Hazel Jean; Quisumbing, Agnes R. 2017. Measuring time use in development settings (English). Policy Research working paper; no. WPS 8147. Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/443201500384614625/Measuring-time-use-in-development-settings
- Siason, I. 2013. Women and gender and development in coastal resources management. pp, 203-236. In I. Siason (ed.) Coastal Resource Management: Perspectives from the Social Sciences. Manila: DA-BAR.
- Siason, I., E. Tech, K.I. Matics, P.S. Choo, M. Shariff, E.S. Heruwati, T. Susilowti, N. Miki, A.B. Shelly, K.G. Rajabharshi, R. Ranjit, P.P.G.N. Siriwardena, M.C. Nandeesha and M. Sunderarajan. (2002). Women in Fisheries in Asia. Global Symposium on Women in Fisheries, 6th Asian Fisheries Forum, ICLARM. 21-48. Available at https://www.worldfishcenter.org/content/women-fisheries-asia
- Sotto, F.B., C. Laron and T. Heager. 2001. Women's participation in sapyaw. In M.J. Williams, M.C. Nandeesha, V.P. Corral, E. Tech and P. Choo (eds). International Symposium on Women in Asian Fisheries. 5th Asian Fisheries Forum. ICLARM. ISBN 9832346029. Available at <u>https://books.google.com.ph/books/about/International_Symposium_on_Women_in_Asia.html?id=XbZg</u> <u>A4mDLF8C&hl=en&output=html_text&redir_esc=y</u>
- Sumagaysay, M.B. 2011. Workshop output on Gender Resource Mapping for the project, Adapting to Climate Change: The Case of Women-Fish Dryers of Brgy. Bislig, Tanauan, Leyte.
- UNDP. 2007. Gender Mainstreaming: A Key Driver of Development in Environment and Energy. A Training Manual. United Nations Development Programme, NY, USA. 84 p. Available at <u>http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Sustainable%20Energy/G</u> <u>ender_Mainstreaming_Training_Manual_2007.pdf</u>
- UN (United Nations). 2015. Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015. United Nations General Assembly A/RES/70/1. 35 p. Available at http://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_R ES_70_1_E.pdf
- UN (United Nations). 2017. The Sustainable Development Goals Report 2017. Department of Economic and Social Affairs, United Nations, NY, USA. 64 p. Available at <u>https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf</u>

- USAID (United States Agency for International Development). 2006. Protection of Human Subjects in Research Supported by USAID. A Mandatory Reference for ADS Chapter 200. 12 p. https://www.usaid.gov/sites/default/files/documents/1864/200mbe.pdf
- USAID (United States Agency for International Development). 2010. Guide to Gender Integration and Analysis: Additional Help for ADS Chapters 201 and 203. EGAT/WID. 16 p. Available at http://usaidprojectstarter.org/sites/default/files/resources/pdfs/201sab.pdf
- USAID (United States Agency for International Development). 2011. Tips for Conducting a Gender Analysis at the Activity or Project Level. Available at <u>http://ndcpartnership.org/content/tips-conducting-gender-analysis-activity-or-project-level</u>
- USAID (United States Agency for International Development). 2012. Gender Equality and Female Empowerment Policy. Washington, DC, USA. 28 p. Available at <u>https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf</u>
- USAID (United States Agency for International Development). 2013. ADS Chapter 205. Integrating Gender Equality and Female Empowerment in USAID's Program Cycle. New Edition 07/17/2013. 25 p. Available at <u>https://www.usaid.gov/sites/default/files/documents/1870/205.pdf</u>
- Weeratunge, N., K. Snyder and P.S. Choo. 2010. Gleaner, fisher, trader, processor: understanding gendered employment in fisheries and aquaculture. Fish and Fisheries. DOI: 10.1111/j.1467-2979.2010.00368.x
- Williams, M.J. 2008. Why look at fisheries through a gender lens? Development. 51:180-185. Doi: 10.1057/dev.2008.2
- Williams, M.J. 2016. How are Fisheries and Aquaculture Institutions Considering Gender Issues? Asian Fisheries Science Special Issue. 29S: 21-48. Available at <u>https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1109&file=Y0dSbUx6QXhNekl</u> <u>3TXpjd01ERTBOemczTXprMk1qZ3VjR1Jt&dldname=How%20are%20Fisheries%20and%20Aquacultur</u> <u>e%20Institutions%20Considering%20Gender%20Issues?.pdf</u>
- WinFish. 2017. Gender Analysis of the Fisheries Sector: General Santos City, Philippines: Final Report submitted to the USAID Oceans and Fisheries Partnership. National Network on Women in Fisheries in the Philippines, Inc. 175 p.
- WWF (World Wildlife Fund). 2016. Natural and Nature-Based Flood Management: a Green Guide. Washington DC: World Wildlife Fund. 15 p. Available at <u>http://envirodm.org/cms/wp-content/uploads/2017/07/WWF-Flood-Green-Guide-2017_Preface_Optimized.pdf</u>
- Yamashita, H. and Belleza, E. 2008. The Value Chain for Philippine Tuna Commodity: Recent Developments and Future Directions. In: Proceedings of the Fourteenth Biennial Conference of the International Institute of Fisheries Economics & Trade, July 2008, Nha Trang, Vietnam: Achieving a Sustainable Future: Managing Aquaculture, Fishing, Trade and Development. Available at https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/s7526d31k