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# Technical Annexes to the



## ***Extended Guidance for Rapid Appraisals of Fisheries Management Systems***

THE USAID OCEANS AND FISHERIES  
PARTNERSHIP

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# 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 develop 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, complemented 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 (Boromthanasri 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).

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

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	<ul style="list-style-type: none"> <li>• Planning/preparation of fisheries management plans</li> </ul>	Cinco (2017), WorldFish (2017d)
RAFMS applications in General Santos, Philippines Learning Site		IAD, VCA	FGD, KII, stakeholder workshop	<ul style="list-style-type: none"> <li>• Increased scientific knowledge/understanding</li> <li>• Planning/preparation of fisheries management plans, research agenda</li> </ul>	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	<ul style="list-style-type: none"> <li>• Increased scientific knowledge/understanding</li> <li>• Planning/preparation of fisheries management plans, research agenda</li> </ul>	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	<ul style="list-style-type: none"> <li>• Decision/policy-making</li> <li>• Increased scientific knowledge/understanding</li> <li>• Information materials</li> <li>• Research agenda</li> <li>• Planning/preparation of fisheries management plans</li> </ul>	Carolino (2017)
Gender Analysis in the Fisheries Sector in Bitung, North Sulawesi, Indonesia	Indonesia	Gender analysis, VCA	Checklist, FGD, KII, HHI, Stakeholder workshop	<ul style="list-style-type: none"> <li>• Decision/policy-making</li> <li>• Increased scientific knowledge/understanding</li> <li>• Information materials</li> <li>• Research agenda</li> <li>• Planning/preparation of fisheries management plans</li> </ul>	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	<ul style="list-style-type: none"> <li>• Decision/policy-making</li> <li>• Increased scientific knowledge/understanding</li> <li>• Planning/preparation of fisheries management plans</li> </ul>	Purwanto (2017a)
Rapid appraisal for tuna species in Fisheries Management Area 716		RA, statistical and mathematical analysis	FGD, KII, HHI, stakeholder workshop	<ul style="list-style-type: none"> <li>• Decision/policy-making,</li> <li>• Increased scientific knowledge/understanding</li> <li>• Planning/preparation of fisheries management plans</li> </ul>	Purwanto (2017b)

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

### Summary profile of selected case studies using RAFMS methodology

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	<ul style="list-style-type: none"> <li>Planning/preparation of fisheries management plans</li> </ul>	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	<ul style="list-style-type: none"> <li>Information materials</li> <li>Planning/preparation of fisheries management plans</li> </ul>	Parks (2017a)
Promotion of Fisheries Co-management in Post-Conflict Liberia	Liberia	2011-2013	IAD, VCA	FGD, KII	<ul style="list-style-type: none"> <li>Decision/policy-making,</li> <li>Information materials</li> <li>Planning/preparation of fisheries management plans</li> </ul>	Parks (2017b)

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)”

Topic	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
<b>Total</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>11</b>

Source: [https://scholar.google.com.ph/citations?user=btW\\_UUQAAAAJ&hl=en](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.

### Ecological Well-Being indicators, measures, and scales

Attribute	Indicator	Measure	Scale
<b>Fisheries/ Biodiversity</b>	Threatened fish species, listed by relevant national and international agencies (e.g. IUCN, CITES)	<ul style="list-style-type: none"> <li>- List of threatened fish species by category</li> <li>- Identified list of fish species protected</li> <li>- Identified list of threatened fish species</li> <li>- Program for fish species protection</li> </ul>	<ul style="list-style-type: none"> <li>- Available: Yes=1, No=0</li> <li>- Available: Yes=1, No=0</li> <li>- Available: Yes=1, No=0</li> <li>- Not available=0; Available = 1; Implemented=2</li> </ul>
	Threatened other (non-fish) marine species (protection) (e.g. turtles, marine mammals, sea urchin, etc.), listed by relevant national and international agencies (e.g. IUCN, CITES)	<ul style="list-style-type: none"> <li>- List of threatened other (non-fish) marine species by category</li> <li>- Identified list of other marine species protected</li> <li>- Identified list of threatened other marine species</li> <li>- Program for other marine species protection</li> </ul>	<ul style="list-style-type: none"> <li>- Available: Yes=1, No=0</li> <li>- Available: Yes=1, No=0</li> <li>- Available: Yes=1, No=0</li> <li>- Not available =0; Available = 1; Implemented=2</li> </ul>
	By-catch/discards	<ul style="list-style-type: none"> <li>- List of discarded or unwanted species</li> <li>- Program to utilize by-catch</li>   <li>- List of measures used on-board to reduce by-catch (e.g., TEDs)</li> </ul>	<ul style="list-style-type: none"> <li>- Available: Yes=1, No=0</li> <li>- Not available: N=0; Available = 1; Implemented=2</li> <li>- Not available: N=0; Available = 1; Implemented=2</li> </ul>
	Community structure (species diversity, composition) (data from fisheries survey, transect survey)	<p>Assuming data can be gathered from stock assessment (species by gear and mean size)</p> <ul style="list-style-type: none"> <li>- List of species caught by gear types</li> <li>- Species composition by gear types</li> <li>- Changes in spatial and temporal distribution of species by gear and by species/groups</li> </ul>	<ul style="list-style-type: none"> <li>- Available: Yes=1, No=0</li> <li>- Decline N=0, Not Decline =1</li> <li>- Smaller=0; Stable or Larger=1</li> </ul>

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

Attribute	Indicator	Measure	Scale
		<ul style="list-style-type: none"> <li>- Minimum dissolved oxygen &gt; 3 ppm of seawater in the coastal area</li> <li>- Eutrophication</li> <li>- Heavy metals and hydrocarbon levels</li> <li>- E-coli level &lt; ... in the coastal area</li> </ul>	<ul style="list-style-type: none"> <li>- No=0, Yes=1</li> <li>- No=0, Yes=1</li> <li>- No=0, Yes=1</li> </ul>
	Marine debris	<ul style="list-style-type: none"> <li>- Program to reduce marine debris</li> <li>- Program to reduce ghost fishing</li> </ul>	<ul style="list-style-type: none"> <li>- No=0, Yes=1</li> <li>- No=0, Yes=1</li> </ul>

### Human Well-Being Indicators and Measures

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



Attribute	Indicator	Measure	Actual Data or Ratings
		<ul style="list-style-type: none"> <li>- Compliance to local/ national/ international seafood safety standards</li> </ul>	<ul style="list-style-type: none"> <li>- Ratings: 0 – no CDTS; 1- w/ CDTS but not implemented; 2- partly implemented; 3- fully implemented</li> <li>- Ratings: 0 – zero compliance; 1- minimal; 2- moderate; 3- high</li> </ul>
<b>Livelihood and Income Sources</b>	Employment Rates in Fisheries (among fishing and fishery-dependent households)	<ul style="list-style-type: none"> <li>- Number of employed (and unemployed) full-time/part-time men and women in fishery-related livelihoods over time</li> <li>- Employment status &amp; history of men and women in fishery</li> <li>- Labor demand for and supply of men and women fishery industry workers</li> </ul>	<ul style="list-style-type: none"> <li>- Total number of full-time/part-time employed, underemployed and unemployed men and women in specific fishery-related livelihoods over time</li> <li>- Total number of fishery-related jobs for men and women and labor participation rate in fishery-related industries</li> </ul>
	Household and Community Dependence to Fishery-Related Livelihoods	<ul style="list-style-type: none"> <li>- Percent share of fishery-related income to total income (list of other sources of income of men and women and amount of income earned)</li> <li>- Number of available job opportunities and types of jobs (fishery and non-fishery related) for men and women</li> <li>- Educational levels by men and women and types/number of livelihood trainings completed</li> <li>- Amount of government and private investments on fishery and non-fishery- related businesses and industries</li> </ul>	<ul style="list-style-type: none"> <li>- Average income (in USD/year) of fishery-related and non-fishery-related income of households (among men and women) over time</li> <li>- Total # of fishery-related and non-fishery-related job opportunities for men and women</li> <li>- Average years of schooling and total # and types of training completed by men and women</li> <li>- Total value (in USD/year) of government and private investments on fishery and non-fishery- related businesses and industries</li> </ul>
	Presence of Alternative/ Supplemental Livelihoods	<ul style="list-style-type: none"> <li>- Type/Number of livelihood trainings programs attended/completed by men and women</li> <li>- Type/Number of alternative/supplemental livelihood programs participated by men and women</li> <li>- Capacity (time and skills) of men and women to engage in supplemental livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>- Total number and types of livelihood trainings programs attended/completed by men and women</li> <li>- Total number and types of alternative/supplemental livelihood programs participated by men and women</li> <li>- Ratings: 0 – no training/experience; 1- minimal; 2- moderate; 3- high</li> </ul>

Attribute	Indicator	Measure	Actual Data or Ratings
		<ul style="list-style-type: none"> <li>- Share to total household income of alternative/supplemental livelihoods of men and women</li> <li>- Amount of government budget allocated and NGO programs for initiating and sustaining alternative/supplemental livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>- Average income (USD/year) from main source of income and from alternative/supplemental sources of income of men and women</li> <li>- Total value (in USD/year) of government budget allocated and number and types of private investments supporting alternative/ supplemental livelihoods</li> </ul>
	Building Resilience of Fishing and Fishery-dependent Households	<ul style="list-style-type: none"> <li>- Diversity in sources of income of fishery-dependent households including those engaged by men and women</li> <li>- 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)</li> <li>- List of community-level and autonomous adaptation strategies available/practiced by men and women</li> <li>- Government budget allocated for disaster preparedness and building resilience</li> </ul>	<ul style="list-style-type: none"> <li>- Ratings: 0 – single; 1- many but all fishery-related; 2 – at least one major fishery-related and non-fishery related; 3- many and diversified</li> <li>- Ratings: 0 – lack of network/social capital; 1- limited; 2- moderate; 3- strong</li> <li>- Total number and types of community-level and autonomous adaptation strategies available/practiced by men and women</li> <li>- Total value (in USD/year) of government budget allocated for disaster preparedness and building resilience</li> </ul>
<b>Access to Resources &amp; Productive Assets</b>	Tenure/access Rights of Fishing (and non-fishing?) Households	<ul style="list-style-type: none"> <li>- Asset ownership (owned or rented) of men and women in fishing households</li> <li>- Access to capital (owned or borrowed) used for fishing operations by men and women</li> <li>- Percent share of fishing households (of men and women) with tenure/access rights</li> <li>- Presence of policies and requirements related to tenure/access rights (e.g. land &amp; water use maps, zoning, permits etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- Total number and types of assets owned or rented by men and women in fishing households</li> <li>- Total amount (in USD) of capital owned or borrowed used for fishing operations by men and women</li> <li>- Total number fishing households (or men and women) with and without tenure/access rights</li> <li>- Ratings: Yes, or No; if Yes, list current policies and requirements</li> </ul>
	Resource Access of Indigenous People	<ul style="list-style-type: none"> <li>- Number of men and women indigenous people engaged in fishery-related livelihoods</li> </ul>	<ul style="list-style-type: none"> <li>- Total number of men and women indigenous people engaged in fishery-related livelihoods</li> </ul>

Attribute	Indicator	Measure	Actual Data or Ratings
		<ul style="list-style-type: none"> <li>- Percent men and women with access to fishery resources</li> <li>- Presence of policies and requirements related to resource access</li> </ul>	<ul style="list-style-type: none"> <li>- Total number of men and women indigenous people with and without access to fishery resources</li> <li>- Ratings: Yes or No; if Yes list current policies and requirements</li> </ul>
	Resource Use/Sharing Conflict	<ul style="list-style-type: none"> <li>- Number/type of resolved and unresolved issues on resource use/sharing conflict</li> <li>- Presence of resource use/sharing arrangements and systems</li> <li>- Presence of policies supporting resource use/sharing (e.g. catch restrictions, land and water use maps, zoning)</li> </ul>	<ul style="list-style-type: none"> <li>- Total number and types of resolved and unresolved issues on resource use/sharing conflict</li> <li>- Ratings: Yes or No; if Yes, list resource use/sharing arrangements and systems</li> <li>- Ratings: Yes, or No; if Yes list policies supporting resource use/sharing</li> </ul>
<b>Markets</b>	Competitiveness of local fishery industry/market	<ul style="list-style-type: none"> <li>- Volume, price, and value of fishery products produced and consumed over time</li> <li>- Current and historical market type, structure, system, and market channels</li> <li>- Number and type of men and women suppliers/producers and consumers of fishery products</li> <li>- Observed market or value chain relationships and inefficiencies</li> <li>- Access of fishery industry-dependent men and women to fair market information</li> </ul>	<ul style="list-style-type: none"> <li>- Total volume (in mt/year), value (in USD/year), and price (in USD/mt) of produced and consumed of fishery products over time</li> <li>- Information on market type, structure, system, and market channels</li> <li>- Total number and types of men and women suppliers/producers and consumers of fishery products</li> <li>- Information on market or value chain relationships and inefficiencies</li> <li>- Ratings: 0 – no access; 1- limited access; 2- access from many sources; 3- access from many reliable sources</li> </ul>
	Level of integration with broader (international) markets	<ul style="list-style-type: none"> <li>- Volume, price, and value of fishery raw materials and products imported and exported over time</li> <li>- Fishery products flow/mapping over time</li> <li>- Productivity and profitability of operations of local industry players</li> <li>- Changes in (international) policies &amp; trade requirements/standards (e.g. CDT, quality, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>- 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</li> <li>- Industry players &amp; product flow/market maps</li> <li>- Information on productivity and profitability</li> <li>- List of (international) policies &amp; trade requirements/standards over time</li> </ul>

Attribute	Indicator	Measure	Actual Data or Ratings
<b>Gender Equity/Equality</b>	Equal/Equitable Benefit Sharing Among Industry Players	<ul style="list-style-type: none"> <li>- Value addition/benefit of men and women from fishery products</li> <li>- Roles of men and women in fisheries and relationship among industry players</li> <li>- Access to fishery-related opportunities and equitable compensation</li> <li>- Gender-sensitive working conditions</li> <li>- Level of knowledge of men and women on fisheries policy</li> <li>- Number of men and women in decision-making bodies (BFAR, OPAG, SAFFAI, fisher organizations)</li> </ul>	<ul style="list-style-type: none"> <li>- Total value addition (in USD/mt) and benefits of men and women from fishery products</li> <li>- List of roles of men and women in fisheries and relationship among industry players</li> <li>- Ratings: 0 – no access; 1- limited access; 2- w/ access but inequitable; 3- w/ equitable access</li> <li>- Ratings: Yes or No; if No list issues/concerns</li> <li>- Ratings: 0 – no knowledge; 1- limited; 2- high but unequal access; 4- high and equal access</li> <li>- Total # and of men and women in decision-making bodies and in key positions</li> </ul>
<b>Health</b>	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
<b>Institutional</b>	Fisheries management office established and operational	Local or inter-governmental alliance, council, etc. established to cover FMA with women members	0=no office 1=local office 2=coordination among local offices 3=FMA wide coordination office
	Participation/co-management	Local stakeholders (men and women) for fisheries management organized FMA-wide; actively participating in EAFM planning and implementation	0=no stakeholder participation 1=stakeholder organized 2=stakeholder consultation 3=stakeholder/management partnership

Attribute	Indicator	Measure	Level of Implementation
	Institutional coordination and cooperation	Multi-institutional collaboration on management sustained (formalized as alliance, council, etc.) with budget, staff, M&E	0=no coordination and cooperation 1=local multi-institutional coordination 2= multi-local multi-institutional coordination 3= FMA wide multi-institutional coordination
	Resources (sustainable financing and revenue generation)	Business plan (with sharing of budget and revenues) to implement EAFM plan at FMA-scale	0=no resources 1=local finances 2=coordinated local finances 3=FMA wide shared finances
	Capacity to do EAFM	There is a capacity building and development established to ensure all stakeholders have knowledge and skills to engage in EAFM	0=no capacity building 1= local capacity building 2=multi-local capacity building 3=FMA wide capacity building
	Conflict management	There is a conflict management mechanism in place and operational	0=no conflict management 1=local conflict management mechanism 2= multi-local conflict management mechanism 3=FMA wide conflict management mechanism
<b>Plans</b>	Comprehensive EAFM plan adopted and regularly updated	EAFM plan for FMA adopted and implemented	0=no EAFM plan 1=local EAFM plan 2=coordinated local EAFM plan 3=FMA EAFM plan
	Management boundaries of the FMA established	Fisheries management area waters delineated (map/chart prepared)	0=no boundaries identified 1= 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 deal with interactions within the fishery sector and with other sectors/users	0=no objectives 1=one objective 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 internally consistent and acceptable through compromise with stakeholders.	0=no objectives 1=objectives are set by government 2=objectives are set in partnership with stakeholders
<b>Knowledge and Information</b>	Program for knowledge, science and interdisciplinary information	New knowledge and information is being gathered, analyzed and coordinated to support EAFM	0=no information program 1=fisheries information program 2=ecosystem information program 3=EAF information program
<b>Management</b>	Precautionary approach	Decision makers are applying foresight to deal with uncertainty in fisheries systems	Yes (1)____ No (0)____
	Appropriate scale	Management is being undertaken at appropriate spatial, temporal and governance scales for the ecosystem being managed	1=management at spatial scale 2=management at governance scale 3=management at spatial, temporal and governance scales
	Fisheries management established with fishing management plan and regulatory measures	<ul style="list-style-type: none"> <li>- FMA-scale fisheries monitoring and management</li> <li>- Inventory/characterization of Fleet/Gear Fishing Technology</li> <li>- Level of Implementation of Regulation</li> <li>- Species-specific management measures</li> <li>- Gear specific management measures</li> </ul>	0=no fisheries plan 1= local fisheries plan and fisheries profile developed 2=Fisheries regulations operational and monitoring conducted regularly and feedback to stakeholders and resource users 3=Fisheries species-specific and gear specific regulations, FMA level monitoring used in fisheries management actions
	Fish registration and licensing system established	Registration and licensing system used to regulate fishing effort at FMA-scale	0=no registration/licensing system 1=registration/licensing system
	Coastal marine habitat management established	FMA-scale habitat monitoring and management	0=no habitat management 1=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	<ul style="list-style-type: none"> <li>- FMA-scale water quality monitoring and management</li> <li>- Best Management Practices to control land-based and at sea pollution</li> </ul>	0=no water quality management 1=Local water quality, baseline assessment conducted and water quality developed 2=water quality monitoring conducted 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 implemented	0=no Marine spatial planning (MSP) 1= 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, enforced and sustained	0=no MPAs 1= 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-by-doing and test-learn-adapt management actions and policies	Yes (1)_____ No (0)_____
<b>Enforcement and Compliance</b>	Fisheries Law enforcement team and program established	Fisheries law enforcement operations regularly conducted over the FMA	0=no law enforcement 1= 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
<b>Law and Policy</b>	Laws and policies supporting EAFM	National and/or local laws and policies supporting the use of EAFM	0=no laws/policies 1=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 measures	Yes (1)___ No (0)_____
<b>Climate Change/ Disaster</b>	Plan and policies on climate change and disaster management/preparedness	Investment in adaptive capacity of men and women and resilient fisheries and coastal communities	0=no climate change/disaster plan/action 1=climate change/disaster plan 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:**

- 1) 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 Questions:**

*Existing CDT Status and Scheme*

- 1) 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**

**Participants:** Government fisheries agency representatives, resource managers and users; community members

#### **Guiding Questions**

- 1) 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**

**Participants:** 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
<b>IUU CONCERNS</b>		<b>(Y/N/NA)</b>
1	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?	
<b>CATCH DOCUMENTATION CONCERNS</b>		
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 different nodes of the supply chain?	
10	Are supporting infrastructures such cell towers/sites including internet/Wi-Fi 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	
<b>CDT CONCERNS</b>		
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	

	<p>information is only captured at some/certain stages of the supply chain, identify which ones.</p> <ul style="list-style-type: none"> <li>(b) Is the CDT system being used by all players in seafood supply chain including fishers, buyers, processors, exporters, importers and government?</li> <li>(c) Does your CDT system support MCS?</li> <li>(d) Do you use CDT system to collect fishery statistics?</li> <li>(e) Do you use CDTS for stock assessment purposes particularly the point-of-harvest data or for spatial planning efforts?</li> <li>(f) Is the existing CDTS capable of robust reporting system and performing analytics on the data collected as a broader approach to marine ecosystem management?</li> <li>(g) Is sufficient technological infrastructure for the CDTS available? For example: 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?</li> <li>(h) Does other similar technology, being adopted, integrated to CDTS for full, international seafood supply chain</li> <li>(i) Is there a functional government infrastructure and/or superstructure of the existing e-CDTS such as hardware, software and personnel or human resources?</li> <li>(j) Do relevant regulations and laws that are related to CDTS exist?</li> <li>(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?</li> <li>(l) Are there existing international market requirements and/or CDT drivers that influence the development of eCDTS?</li> <li>(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?</li> <li>(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?</li> <li>(o) 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?</li> <li>(p) Are there any regulatory limitations on eCDT? Any regulations relevant to seafood traceability? Any regulatory control on product movement like quota?</li> <li>(q) Does eCDTS create a data burden? It is an issue, and if so, with whom?</li> </ul>	
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# ANNEX V. TEMPLATES FOR GENDER ANALYSIS RESEARCH

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

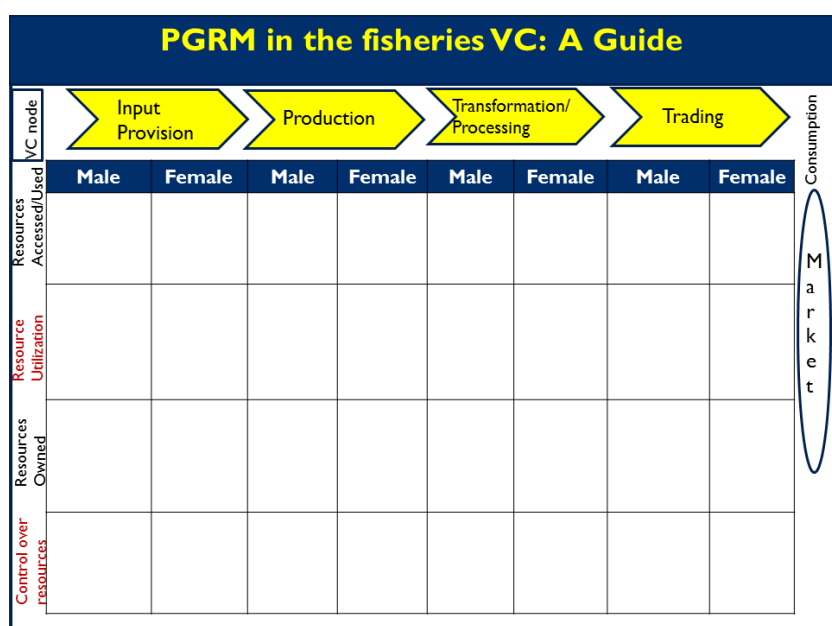
## Template for Activity Analysis–

<b>TIME &amp; SPACE</b>	For Time: What is a typical day for you starting from rising in the morning until retiring for sleep, as you engage in both work and household activities? (Ask who does reproductive roles that are not mentioned).																																																																											
	For Space: Where do you perform the economic tasks (e.g., processing, selling, trading) you mentioned? For example: (Is it safe to assume that reproductive tasks are home based)																																																																											
	<table border="1"> <thead> <tr> <th>Time</th> <th>Activities</th> <th>Where done: home, work area, community</th> </tr> </thead> <tbody> <tr><td>4:00AM to 5:00AM</td><td></td><td></td></tr> <tr><td>5:00AM to 6:00AM</td><td></td><td></td></tr> <tr><td>6:00AM to 7:00AM</td><td></td><td></td></tr> <tr><td>7:00AM to 8:00AM</td><td></td><td></td></tr> <tr><td>8:00AM to 9:00AM</td><td></td><td></td></tr> <tr><td>9:00AM to 10:00AM</td><td></td><td></td></tr> <tr><td>10:00AM to 11:00AM</td><td></td><td></td></tr> <tr><td>11:00AM to 12:00NN</td><td></td><td></td></tr> <tr><td>12:00NN to 1:00PM</td><td></td><td></td></tr> <tr><td>1:00PM to 2:00PM</td><td></td><td></td></tr> <tr><td>2:00PM to 3:00PM</td><td></td><td></td></tr> <tr><td>3:00PM to 4:00PM</td><td></td><td></td></tr> <tr><td>4:00PM to 5:00PM</td><td></td><td></td></tr> <tr><td>5:00PM to 6:00PM</td><td></td><td></td></tr> <tr><td>6:00PM to 7:00PM</td><td></td><td></td></tr> <tr><td>7:00PM to 8:00PM</td><td></td><td></td></tr> <tr><td>8:00PM to 9:00PM</td><td></td><td></td></tr> <tr><td>9:00PM to 10:00PM</td><td></td><td></td></tr> <tr><td>10:00PM to 11:00PM</td><td></td><td></td></tr> <tr><td>11:00PM to 12:00MN</td><td></td><td></td></tr> <tr><td>12:00MN to 1:00AM</td><td></td><td></td></tr> <tr><td>1:00AM to 2:00AM</td><td></td><td></td></tr> <tr><td>2:00AM to 3:00AM</td><td></td><td></td></tr> <tr><td>3:00AM to 4:00AM</td><td></td><td></td></tr> </tbody> </table>	Time	Activities	Where done: home, work area, community	4:00AM to 5:00AM			5:00AM to 6:00AM			6:00AM to 7:00AM			7:00AM to 8:00AM			8:00AM to 9:00AM			9:00AM to 10:00AM			10:00AM to 11:00AM			11:00AM to 12:00NN			12:00NN to 1:00PM			1:00PM to 2:00PM			2:00PM to 3:00PM			3:00PM to 4:00PM			4:00PM to 5:00PM			5:00PM to 6:00PM			6:00PM to 7:00PM			7:00PM to 8:00PM			8:00PM to 9:00PM			9:00PM 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		
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Aside from the tasks mentioned above, what other tasks do you perform? May be not on a daily basis but are being performed once/twice/thrice in a week?																																																																												

This template can be used to gather information from women and men on their productive, reproductive, community work, and leisure/rest activities, when they are done, and how much time is used for each.

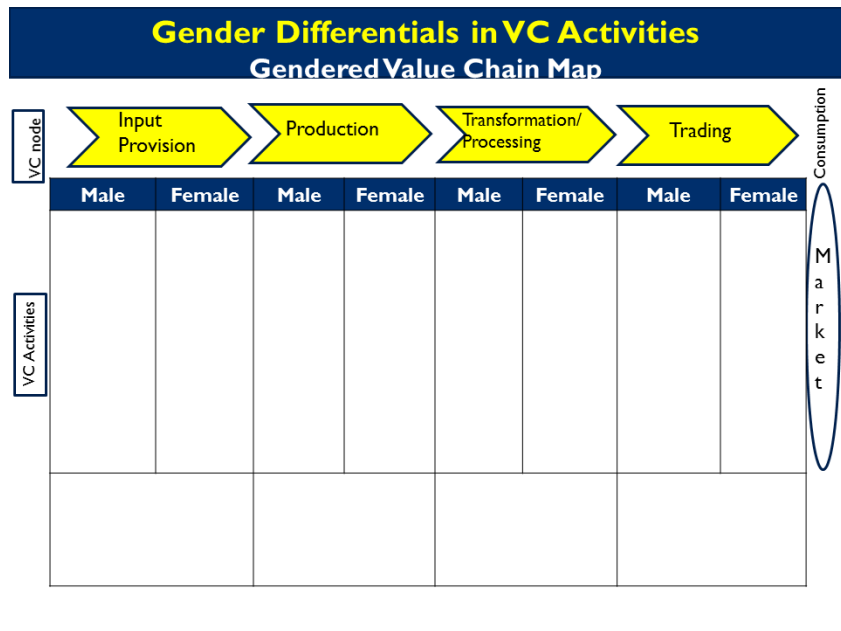
## Template for Participatory Gender Resource Mapping (PGRM) in the Fisheries Value Chain –

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



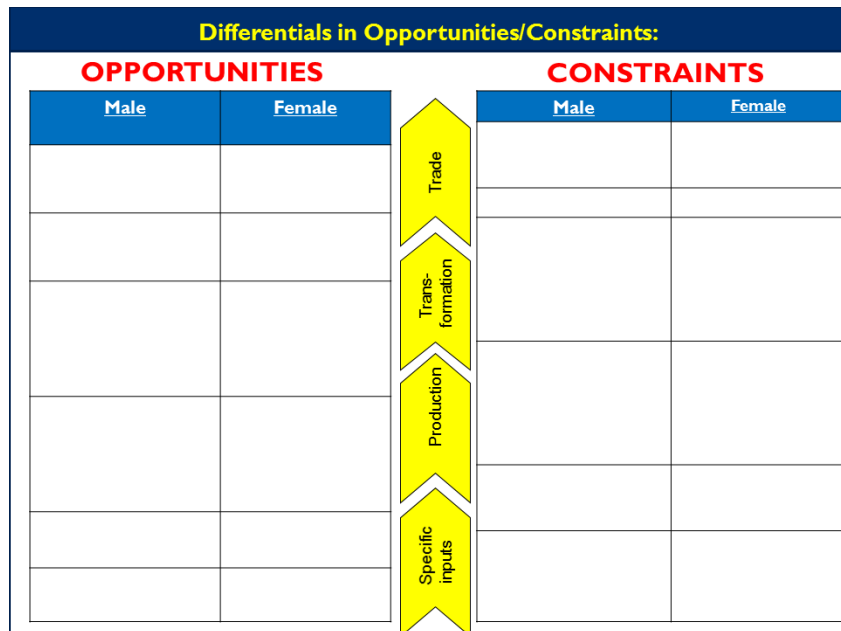
**Template for Gender Responsive Value Chain Analysis –**

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



**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.



## 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: FISHERS AND OPERATORS

<p><b>Screening Questions</b></p>	<p>1) May I know the nature of your work?</p> <p>A - Captain of a fishing boat/vessel</p> <p>B - Fisher</p> <p>C - Crew/labor/worker of a fishing operation</p> <p>If respondent answered A or B, proceed to Question No. 2</p> <p>If respondents answered C, terminate interview and replace respondent</p> <p>2) Do you fish for tuna?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If answer is YES, proceed with the interview</p> <p>If answer is NO, terminate interview and replace respondent</p>
<p><b>Socio-demographics</b></p>	<p><b>For respondent</b></p> <p>What is your name:</p> <p>Address (in General Santos City):</p> <p>Address (outside General Santos City):</p> <p>How many years have you lived in General Santos City? ___ years</p> <p>Sex: <input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p> <p>Highest educational attainment:</p> <p><input type="checkbox"/> No formal schooling</p> <p><input type="checkbox"/> Some grade school</p> <p><input type="checkbox"/> Grade school graduate</p> <p><input type="checkbox"/> Some high school</p> <p><input type="checkbox"/> High school graduate</p> <p><input type="checkbox"/> Some college</p> <p><input type="checkbox"/> Vocational schooling</p> <p><input type="checkbox"/> College graduate</p> <p><input type="checkbox"/> Post Graduate</p>



	<p>Civil Status:</p> <p><input type="checkbox"/> Single</p> <p><input type="checkbox"/> Married</p> <p><input type="checkbox"/> Separated</p> <p><input type="checkbox"/> Widow/Widower</p> <p><input type="checkbox"/> Live-in</p> <p>Ethnic group:</p> <p><input type="checkbox"/> Bicolano</p> <p><input type="checkbox"/> Cebuano-Bisaya</p> <p><input type="checkbox"/> Ilocano</p> <p><input type="checkbox"/> Ilonggo</p> <p><input type="checkbox"/> Tagalog</p> <p><input type="checkbox"/> Waray</p> <p><input type="checkbox"/> Badjao</p> <p><input type="checkbox"/> B'laan</p> <p><input type="checkbox"/> Maguindanaoan</p> <p><input type="checkbox"/> Maranao</p> <p><input type="checkbox"/> Tausug</p> <p><input type="checkbox"/> T'boli</p> <p><input type="checkbox"/> Others, specify _____</p> <p><b>About spouse/partner of respondent, if applicable:</b></p> <p>Sex: <input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p> <p>Highest educational attainment:</p> <p><input type="checkbox"/> No formal schooling</p> <p><input type="checkbox"/> Some grade school</p> <p><input type="checkbox"/> Grade school graduate</p> <p><input type="checkbox"/> Some high school</p> <p><input type="checkbox"/> High school graduate</p> <p><input type="checkbox"/> Some college</p> <p><input type="checkbox"/> Vocational schooling</p>
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	<p><input type="checkbox"/> College graduate</p> <p><input type="checkbox"/> Post Graduate</p> <p>Civil Status:</p> <p><input type="checkbox"/> Single</p> <p><input type="checkbox"/> Married</p> <p><input type="checkbox"/> Separated</p> <p><input type="checkbox"/> Widow/Widower</p> <p><input type="checkbox"/> Live-in</p> <p>Ethnic group:</p> <p><input type="checkbox"/> Bicolano</p> <p><input type="checkbox"/> Cebuano-Bisaya</p> <p><input type="checkbox"/> Ilocano</p> <p><input type="checkbox"/> Ilonggo</p> <p><input type="checkbox"/> Tagalog</p> <p><input type="checkbox"/> Waray</p> <p><input type="checkbox"/> Badjao</p> <p><input type="checkbox"/> B'laan</p> <p><input type="checkbox"/> Maguindanaoan</p> <p><input type="checkbox"/> Maranao</p> <p><input type="checkbox"/> Tausug</p> <p><input type="checkbox"/> T'boli</p> <p><input type="checkbox"/> Others, specify _____</p> <p>How many years has your spouse lived in General Santos City? ____ years</p>
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**For respondent only**

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

Household Members	Age	Sex	
		Male	Female
1. Respondent			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

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

- Fishing
- Fish processing
- Fish trading/selling
- Farming
- Profession
- Remittance
- Others, specify \_\_\_\_\_

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

- Fishing
- Fish processing
- Fish trading/selling
- Farming

	<p> <input type="checkbox"/> Profession  <input type="checkbox"/> Remittance  <input type="checkbox"/> Others, specify _____  <input type="checkbox"/> None </p> <p>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)</p> <p> <input type="checkbox"/> 0 to 2,000  <input type="checkbox"/> 2,001 to 5,000  <input type="checkbox"/> 5,001 to 10,000  <input type="checkbox"/> 10,001 to 15,000  <input type="checkbox"/> 15,001 to 20,000  <input type="checkbox"/> 20,001 to 25,000  <input type="checkbox"/> 25,001 to 30,000  <input type="checkbox"/> 30,001 to 50,000  <input type="checkbox"/> 50,001 to 100,000  <input type="checkbox"/> above 100,000 </p> <p>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)</p> <p> <input type="checkbox"/> 0 to 2,000  <input type="checkbox"/> 2,001 to 5,000  <input type="checkbox"/> 5,001 to 10,000  <input type="checkbox"/> 10,001 to 15,000  <input type="checkbox"/> 15,001 to 20,000  <input type="checkbox"/> 20,001 to 25,000  <input type="checkbox"/> 25,001 to 30,000  <input type="checkbox"/> 30,001 to 50,000  <input type="checkbox"/> 50,001 to 100,000  <input type="checkbox"/> above 100,000 </p> <p>7. Are you a member of any fishing-related organization?</p> <p> <input type="checkbox"/> Yes  <input type="checkbox"/> No </p> <p>If no, proceed to Question No. 9</p>
--	--

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

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

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

10. What is your position in the fishing operations?

- Owner
- Boat Captain /Operator of the fishing vessel
- Owner-Operator
- Officer
- Crew/Worker/Pasahero

11. What is the size of your fishing vessel (main fishing vessel)?

- <3 GT
- 3-20 GT
- 21-150 GT
- >150 GT

12. How many days does the fishing boat spend at sea?

- 1 day or less
- 2-3 days
- 4-7 days
- 2-3 weeks

	<p>___ 1-2 months          ___ &gt; 3 months</p> <p>13. Is fishing boat/vessel registered with LGU/BFAR?          ___ Yes ___ No ___ Don't know</p> <p>If yes, in whose name is it registered?          ___ Male ___ Female ___ Corporation</p> <p>If a Corporation, is the president of corporation male or female?          ___ Male ___ Female</p>
	<p>14. How was the fishing boat obtained? (Multiple answers allowed)</p> <p>___ Self-financed          ___ Borrowed money from relatives/family/friends          ___ Loan (specify lender e.g. bank, private individual) _____          ___ Buyer          ___ By inheritance          ___ Government Assistance          ___ Non-government agencies          ___ Others, please specify _____</p> <p>15. How did you/fishing operator obtain your fishing gears? (Multiple answers allowed)</p> <p>___ Self-financed          ___ Borrowed money from relatives/family/friends          ___ Loan (specify lender e.g. bank, private individual) _____          ___ Buyer          ___ By inheritance          ___ Government Assistance          ___ Non-government agencies          ___ Others, please specify _____</p> <p>16. How does the owner raise cash when needed for the fishing operations? (Multiple answers allowed)</p> <p>___ Self-financing, proceed to Question No. 18          ___ Borrow money from relatives/family/friends          ___ Loan (specify lender, e.g. bank, private individual) _____          ___ Buyer          ___ Others, please specify _____</p>

	<input type="checkbox"/> Don't know																																										
	<p>17. When the owner borrows money to support the fishing business operations, who does the borrowing? What is the sex of the borrower?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 70%;">Position of responsible person</th> <th colspan="2" style="text-align: center;">Sex</th> </tr> <tr> <th style="width: 15%;">Male</th> <th style="width: 15%;">Female</th> </tr> </thead> <tbody> <tr> <td>a) Fisher/Operator</td> <td></td> <td></td> </tr> <tr> <td>b) Spouse</td> <td></td> <td></td> </tr> <tr> <td>c) Business Partner</td> <td></td> <td></td> </tr> <tr> <td>d) Relative</td> <td></td> <td></td> </tr> <tr> <td>e) Others, please specify: _____</td> <td></td> <td></td> </tr> </tbody> </table>	Position of responsible person	Sex		Male	Female	a) Fisher/Operator			b) Spouse			c) Business Partner			d) Relative			e) Others, please specify: _____																								
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	<p>18. How does the owner recruit workers for the fishing business? (Multiple answers allowed)</p> <p><input type="checkbox"/> Personal Choice</p> <p><input type="checkbox"/> Referrals</p> <p><input type="checkbox"/> Advertisement</p> <p><input type="checkbox"/> Internet</p> <p><input type="checkbox"/> Others, please specify _____</p>																																										
	<p>19. How fast can the owner recruit workers? (one answer only)</p> <p><input type="checkbox"/> Within a day</p> <p><input type="checkbox"/> Within a week</p> <p><input type="checkbox"/> Within a month</p> <p><input type="checkbox"/> More than a month</p>																																										
	<p>20. How many workers do you have in one fishing operation (indicate number)? What is their employment status?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 20%;"></th> <th rowspan="2" style="width: 25%;"></th> <th rowspan="2" style="width: 15%;">Indicate Number</th> <th colspan="2" style="text-align: center;">Employment Status (check box)</th> </tr> <tr> <th style="width: 15%;">Regular</th> <th style="width: 15%;">Seasonal</th> </tr> </thead> <tbody> <tr> <td>Men</td> <td>18 yrs &amp; above</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Young Men</td> <td>15 yrs to below 18 yrs</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Women</td> <td>18 yrs &amp; above</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Young Women</td> <td>15 yrs to below 18 yrs</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Boys</td> <td>below 15 yrs.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Girls</td> <td>below 15 yrs.</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Total number of workers in one fishing operation</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Indicate Number	Employment Status (check box)		Regular	Seasonal	Men	18 yrs & above				Young Men	15 yrs to below 18 yrs				Women	18 yrs & above				Young Women	15 yrs to below 18 yrs				Boys	below 15 yrs.				Girls	below 15 yrs.				Total number of workers in one fishing operation				
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	<p>21. From whom do you get reliable information on new fishing practices? (Multiple answers allowed)</p> <p><input type="checkbox"/> National government agencies</p> <p><input type="checkbox"/> Local Government Units</p> <p><input type="checkbox"/> Other fishers</p> <p><input type="checkbox"/> Tuna industry association</p> <p><input type="checkbox"/> Radio</p> <p><input type="checkbox"/> TV</p> <p><input type="checkbox"/> Internet</p> <p><input type="checkbox"/> Others, please specify _____</p>																										
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	<p>25. Who usually bring your tuna catch to the buyer? (multiple answers allowed)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 30%;"></td> <td style="width: 40%;"></td> <td style="width: 30%; text-align: center;">Check box</td> </tr> <tr> <td>Men</td> <td>18 yrs &amp; above</td> <td></td> </tr> <tr> <td>Young Men</td> <td>15 yrs to below 18 yrs</td> <td></td> </tr> <tr> <td>Women</td> <td>18 yrs &amp; above</td> <td></td> </tr> <tr> <td>Young Women</td> <td>15 yrs to below 18 yrs</td> <td></td> </tr> <tr> <td>Boys</td> <td>below 15 yrs.</td> <td></td> </tr> <tr> <td>Girls</td> <td>below 15 yrs.</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>									Check box	Men	18 yrs & above		Young Men	15 yrs to below 18 yrs		Women	18 yrs & above		Young Women	15 yrs to below 18 yrs		Boys	below 15 yrs.		Girls	below 15 yrs.																																												
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	<p>27. Do you allow your buyers to get your fish on credit?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, why not?</p> <p><input type="checkbox"/> I need the cash for fishing operations</p> <p><input type="checkbox"/> I need the cash for everyday expenses</p> <p><input type="checkbox"/> Avoid risks of non-payment</p> <p><input type="checkbox"/> Difficulty of collecting debts</p> <p><input type="checkbox"/> Others, please specify _____</p> <p>If yes, what percentage of those you allow credit to, are women? ___%</p>																																																																						
<b>PRACTICES &amp; PARTICIPATION</b>	<p>28. In your fishing operation, who usually performs the following?</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 30%;">Activities</th> <th style="width: 8%;">Men</th> <th style="width: 8%;">Women</th> <th style="width: 8%;">Young Men</th> <th style="width: 8%;">Young Women</th> <th style="width: 8%;">Boys</th> <th style="width: 8%;">Girls</th> <th style="width: 8%;">N/A</th> </tr> </thead> <tbody> <tr> <td>a) Process registration and legal documents</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>b) Hiring of crew</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>c) Plan the trip</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>d) Prepare the boat and equipment</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>e) Procure diesel</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>f) Buy the baits</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>g) Prepare food and water for the crew</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>							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							
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h) Prepare the nets and accessories								
i) Operate the boat engine								
j) Search for fish or fish school								
k) Set the net or gear								
l) Dive								
m) Haul the net								
n) Bleeding the tuna								
o) Beheading the fish								
p) Sort the catch								
q) Storage in ice								
r) Unload the catch								
s) Weigh the catch								
t) Grade the catch								
u) Inspecting								
v) Labelling								
w) Negotiate with the buyer								
x) Transport to the buyer								
y) Receive payment								
z) Recording of catch								
aa) Recordkeeping of finances								
bb) Payment of salaries and bills								
cc) Mend the net or gear								

29. Does a fish observer join the fishing operation (at sea)?

\_\_\_ Yes

\_\_\_ No

If no, proceed to Question No. 32.

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

	Number
Men	
Women	

31. Who pays the fish observers?

\_\_\_ My company

\_\_\_ Others, please specify \_\_\_\_\_

\_\_\_ I don't know

	<p>32. Do BFAR enumerators/personnel board your boat and document catch (in landing sites)?</p> <p>___ Yes</p> <p>___ No</p> <p>If no, proceed to Question No. 34.</p> <p>33. If yes, how many enumerators board your boat (in landing sites)?</p> <table border="1" style="margin-left: 20px; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;">Number</td> </tr> <tr> <td>Men</td> <td></td> </tr> <tr> <td>Women</td> <td></td> </tr> </table>		Number	Men		Women																														
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	<p>34. Do you attend the following activities?</p> <p>___ Yes ___ No</p> <p>If no, proceed to Question No. 35.</p> <p>If yes, who usually attend the following activities?</p> <table border="1" style="margin-left: 20px; border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="width: 50%;">Activities</th> <th style="width: 8%;">Men</th> <th style="width: 8%;">Women</th> <th style="width: 8%;">Young Men</th> <th style="width: 8%;">Young Women</th> <th style="width: 8%;">Boys</th> <th style="width: 8%;">Girls</th> </tr> </thead> <tbody> <tr> <td>a) Meeting (People's Organization, LGUs, NGAs)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>b) Seminars/ Training related to fishing</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>c) Community meetings</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>d) Public hearings related to fishing</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Activities	Men	Women	Young Men	Young Women	Boys	Girls	a) Meeting (People's Organization, LGUs, NGAs)							b) Seminars/ Training related to fishing							c) Community meetings							d) Public hearings related to fishing						
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<b>KNOWLEDGE, BELIEFS &amp; PERCEPTIONS</b>	<p>35. Based on your experiences, to what extent do you agree or disagree to the following statements?</p> <p><i>(NOTE: enumerator has to read each sentence and ask respondents whether they agree or disagree, or they have no position on the matter.)</i></p> <table border="1" style="margin-left: 20px; border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="width: 60%;">Statement</th> <th style="width: 15%;">Agree</th> <th style="width: 15%;">Neither Agree nor Disagree</th> <th style="width: 10%;">Disagree</th> </tr> </thead> <tbody> <tr> <td>a) Men buyers offer better prices than women</td> <td></td> <td></td> <td></td> </tr> <tr> <td>b) Women buyers are easier to deal with than men buyers</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Statement	Agree	Neither Agree nor Disagree	Disagree	a) Men buyers offer better prices than women				b) Women buyers are easier to deal with than men buyers																										
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	<p>c) Women buyers are more particular about quality of fish than men buyers</p> <p>d) Men buyers pay more promptly than women buyers</p> <p>e) It is easier to collect payment from women buyers than men buyers</p> <p>f) Women are encouraged to join fishing trip</p> <p>g) Pregnant women on board bring bad luck</p> <p>h) Women who have their monthly period bring good luck to fishing trip</p>																														
	<p>36. I will read out statements and for each please say whether they are true or false:</p> <p>(NOTE: enumerator to read each sentence and ask respondents if they believe each statement is TRUE or FALSE)</p> <table border="1"> <thead> <tr> <th></th> <th>True</th> <th>False</th> </tr> </thead> <tbody> <tr> <td>Tuna is a migratory fish</td> <td></td> <td></td> </tr> <tr> <td>Commercial fishers are not allowed to fish within 15 km limits of municipal waters</td> <td></td> <td></td> </tr> <tr> <td>The legal size for purse seine nets to catch tuna is 3 cm</td> <td></td> <td></td> </tr> <tr> <td>The city government requires the registration of purse seine</td> <td></td> <td></td> </tr> <tr> <td>Skipjack is a kind of tuna</td> <td></td> <td></td> </tr> <tr> <td>A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area</td> <td></td> <td></td> </tr> <tr> <td>A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets</td> <td></td> <td></td> </tr> <tr> <td>To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish</td> <td></td> <td></td> </tr> </tbody> </table>					True	False	Tuna is a migratory fish			Commercial fishers are not allowed to fish within 15 km limits of municipal waters			The legal size for purse seine nets to catch tuna is 3 cm			The city government requires the registration of purse seine			Skipjack is a kind of tuna			A Philippine-flagged fishing vessel is allowed to fish in High Sea Pockets 1, 2 and 3 in the Western and Central Pacific Ocean area			A tuna fishing vessel operator can export tuna to the European Union (EU) even without submission of catch logsheets			To ensure traceability, tuna product labels should include the name of fishing vessels that caught the fish		
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<b>LEGAL RIGHTS &amp; STATUS</b>	<p>37. Are you aware of fisheries-related policies/laws?</p> <p>(NOTE: Interviewer must have working knowledge of each of the listed laws.)</p> <p>___ Yes ___ No</p> <p>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).</p> <p>If no, proceed to Question No. 38.</p>																														

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

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

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

**POWER & DECISION-MAKING**

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

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

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

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

	Timing of fishing operation					
	Hiring of workers					
	42. Are there any fisheries related-projects/activities in your community? __ Yes __ No					
	43. If yes, to what extent are you involved in these fisheries related-projects/activities in your community?					
	Community Activities	Never	Some-times	Often	Always	N/A
	Meetings					
	Training					
	Public hearing					
	Socials					
	Researches					
	Committee membership					
	Association membership					
	Bantay Dagat					
	Coastal resource management					
<b>TIME &amp; SPACE</b>	<p>For Time:</p> <p>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).</p> <p>For Space:</p> <p>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).</p> <p>Aside from the tasks mentioned above, what other tasks do you perform? May be not on a daily basis but are being performed once/twice/thrice in a week?</p>					

## 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/](http://www.genderaquafish.org/discover-gaf/gaf-networks-and-resources/) for links to select resources below.

### **Asian Fisheries Society –**

- Gender in Aquaculture and Fisheries Section – [www.genderaquafish.org/gaf-section/](http://www.genderaquafish.org/gaf-section/)
- Gender/women, fisheries/aquaculture resources – [www.genderaquafish.org/resources-3/asian-fisheries-society-genderwomen-and-fisheries-resources/](http://www.genderaquafish.org/resources-3/asian-fisheries-society-genderwomen-and-fisheries-resources/)

**African Network of Women in the Fisheries Sector –** [www.comhafat.org/en/reseaux.php?id=3](http://www.comhafat.org/en/reseaux.php?id=3)

**Australia’s Women’s Industry Network Seafood Community –** [www.winsc.org.au/](http://www.winsc.org.au/)

### **European Union –**

- Women in Fisheries in the EU – [www.eptthinktank.eu/2013/10/14/women-and-fisheries-in-the-european-union/](http://www.eptthinktank.eu/2013/10/14/women-and-fisheries-in-the-european-union/)
- Relevance of gender in the policy arena – [www.eige.europa.eu/gender-mainstreaming/sectoral-areas/maritime-affairs-and-fisheries](http://www.eige.europa.eu/gender-mainstreaming/sectoral-areas/maritime-affairs-and-fisheries)
- European Network of Women’s Organizations in Fisheries and Aquaculture – [www.akteaplatform.eu/?lang=es](http://www.akteaplatform.eu/?lang=es); [www.twitter.com/AKTEAwif](https://www.twitter.com/AKTEAwif)

### **FAO –**

- Gender mainstreaming (Gender Programme) – [www.fao.org/gender/gender-home/en/](http://www.fao.org/gender/gender-home/en/)
- FAO Fisheries and Aquaculture Department (gender, fisheries and aquaculture) – [www.fao.org/fishery/topic/16605/en](http://www.fao.org/fishery/topic/16605/en)
- FAO Regional Fisheries Livelihoods Programme for South and South East Asia – [www.fao.org/fishery/rflp/en](http://www.fao.org/fishery/rflp/en)

**Women in Fisheries Network Fiji –** [www.womeninfisheriesfiji.org/](http://www.womeninfisheriesfiji.org/)

**International Collective in Support of Fishworkers –** [www.icsf.net/en/yemaya.html](http://www.icsf.net/en/yemaya.html)

**Mundus Maris, Sciences and Arts for Sustainability –** [www.mundusmaris.org/](http://www.mundusmaris.org/)

**OECD Wikigender –** [www.wikigender.org/index.php/Gender\\_and\\_Fisheries](http://www.wikigender.org/index.php/Gender_and_Fisheries)

**Red Española de Mujeres en el Sector Pesquero (Spanish Network of Women in the Fisheries Sector) –** [www.mapama.gob.es/en/pesca/temas/red-mujeres/](http://www.mapama.gob.es/en/pesca/temas/red-mujeres/)

### **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 – [www.seafdec.org/download/report-of-the-expert-workshop-on-](http://www.seafdec.org/download/report-of-the-expert-workshop-on-)



[regional-approach-for-the-implementation-of-fao-voluntary-guidelines-for-securing-sustainable-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 – [www.seafdec.org/experts-workshop-securing-sustainable-small-scale-fisheries-human-rights-based-approach-gender-equitability-issue-organized/](http://www.seafdec.org/experts-workshop-securing-sustainable-small-scale-fisheries-human-rights-based-approach-gender-equitability-issue-organized/)
- Fish for the People Vol. 16 No. 2 (2018) – [www.repository.seafdec.org/handle/20.500.12066/1374](http://www.repository.seafdec.org/handle/20.500.12066/1374)

**Secretariat for the Pacific Community** (Women in Fisheries Information Bulletins) – [www.spc.int/coastfish/en/publications/bulletins/women-in-fisheries.html](http://www.spc.int/coastfish/en/publications/bulletins/women-in-fisheries.html)

**The National Network for Women in Fisheries in the Philippines** – [www.womeninfisheriesph.org](http://www.womeninfisheriesph.org)

**University of Stirling** (Gender Issues in Aquaculture) – [www.dfid.stir.ac.uk/dfid/gender/gender.htm](http://www.dfid.stir.ac.uk/dfid/gender/gender.htm)

#### **USAID –**

- ADS Chapter 205 Integrating Gender Equality and Female Empowerment in USAID's Program Cycle – [www.usaid.gov/sites/default/files/documents/1870/205.pdf](http://www.usaid.gov/sites/default/files/documents/1870/205.pdf)
- Gender at USAID (presentation) – [https://www.usaid.gov/sites/default/files/documents/1865/Gender\\_USAID.pdf](https://www.usaid.gov/sites/default/files/documents/1865/Gender_USAID.pdf)
- Gender Equality and Female Empowerment Policy – [https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy\\_0.pdf](https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf)

**USAID Oceans and Fisheries Partnership** – [www.seafdec-oceanspartnership.org](http://www.seafdec-oceanspartnership.org)

**World Bank, FAO and IFAD Gender in Agriculture Sourcebook** (Fisheries and Aquaculture Module) – [www.siteresources.worldbank.org/INTGENAGRLIVSOUBOOK/Resources/Module13.pdf](http://www.siteresources.worldbank.org/INTGENAGRLIVSOUBOOK/Resources/Module13.pdf)

**Women Leaders' Forum (Coral Triangle Initiative for Coral Reef, Fisheries and Food Security-CTI-CFF)/(Coral Triangle Center-CTC)** – [www.coraltriangleinitiative.org/wlf](http://www.coraltriangleinitiative.org/wlf)

**WorldFish** (Gender as a Cross-Cutting Theme) – [www.worldfishcenter.org/content/gender](http://www.worldfishcenter.org/content/gender)

**WSI (International Association for Women in the Seafood Industry)** – [www.wsi-asso.org](http://www.wsi-asso.org)

## REFERENCES

### CHAPTER ONE –

- Agbayani, R.F., D.B. Batticaloa, E.T. Qunitio 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 [https://www.researchgate.net/publication/223138744\\_How\\_Good\\_is\\_Good\\_A\\_Rapid\\_Appraisal\\_Technique\\_for\\_Evaluation\\_of\\_the\\_Sustainability\\_Status\\_of\\_Fisheries\\_of\\_the\\_North\\_Atlantic](https://www.researchgate.net/publication/223138744_How_Good_is_Good_A_Rapid_Appraisal_Technique_for_Evaluation_of_the_Sustainability_Status_of_Fisheries_of_the_North_Atlantic)
- 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 <https://www.worldfishcenter.org/content/diagnosis-and-management-small-scale-fisheries-developing-countries>
- Boromthanasarat, 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 <http://connection.ebscohost.com/c/articles/24655345/community-led-mangrove-rehabilitation-experiences-from-hua-khao-community-songkhla-thailand>
- 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 [https://www.researchgate.net/publication/263247439\\_Socioeconomic\\_Monitoring\\_Guidelines\\_for\\_Coastal\\_Managers\\_in\\_Southeast\\_Asia\\_SocMonSEA](https://www.researchgate.net/publication/263247439_Socioeconomic_Monitoring_Guidelines_for_Coastal_Managers_in_Southeast_Asia_SocMonSEA)
- 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>
- Campbell, J.R. 2001. Participatory Rural Appraisal as Qualitative Research: Distinguishing Methodological Issues from Participatory Claims. Human Organization. 60(4):380-389. Available at <http://sfaajournals.net/doi/abs/10.17730/humo.60.4.4bgnlmy60fkvq4r2?code=apan-site&journalCode=humo>
- 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 [http://www.parkdatabase.com/documents/download/1981\\_chambers\\_rapid\\_rural\\_appraisal\\_rationale\\_and\\_repertoire\\_3.pdf](http://www.parkdatabase.com/documents/download/1981_chambers_rapid_rural_appraisal_rationale_and_repertoire_3.pdf)

- Chambers, R. 1992. Rural Appraisal: Rapid, Relaxed and Participatory. Institute of Development Studies. IDS Discussion Paper 311. 68 p. Available at <https://www.ids.ac.uk/files/Dp311.pdf>
- 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](https://www.sciencedirect.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](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 <ftp://ftp.itc.nl/pub/pgis/PGIS%20Articles/The%20use%20and%20abuse%20of%20participatory%20rural%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\\_Area\\_as\\_New\\_Horizon\\_for\\_Aquaculture\\_Development\\_A\\_Golden\\_Dream\\_to\\_the\\_Rural\\_Communities\\_of\\_Begumgonj\\_Noakhali/links/0046351824f6202ca8000000/Waterlogged-Area-as-New-Horizon-for-Aquaculture-Development-A-Golden-Dream-to-the-Rural-Communities-of-Begumgonj-Noakhali.pdf](https://www.researchgate.net/profile/M_Shahadat_Hossain/publication/215792005_Waterlogged_Area_as_New_Horizon_for_Aquaculture_Development_A_Golden_Dream_to_the_Rural_Communities_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*. 1 (1) 33-46. Available at <http://jurcon.ums.edu.my/ojums/index.php/j-sustainable-tourism/article/download/937/58>; [https://www.researchgate.net/publication/283664484\\_SUSTAINING\\_THE\\_COASTAL\\_FISHERY\\_RESOURCES\\_IN\\_SAN\\_VICENTE\\_PALAWAN](https://www.researchgate.net/publication/283664484_SUSTAINING_THE_COASTAL_FISHERY_RESOURCES_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 <http://www.fao.org/3/a-v9878e.pdf>
- FAO. 2003. Fisheries management: the ecosystem approach. Technical Guidelines for Responsible Fisheries. Supplement 2. Rome. Available at <http://www.fao.org/3/a-i1146e.pdf>
- FAO. 2005. Putting into practice the ecosystem approach to fisheries. Available at <http://www.fao.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](http://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 <http://www.fao.org/3/i4356en/i4356EN.pdf>
- 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 post-tsunami Aceh: Status and needs from participatory appraisals. NAGA, WorldFish Center Quarterly. 29(3-4):19-30. Available at <https://www.worldfishcenter.org/content/fisheries-rehabilitation-post-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 <https://www.worldfishcenter.org/content/operationalizing-ecosystem-approach-small-scale-fisheries-management-philippines-iligan-bay>
- Garces, L. 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 <http://www.participatorymethods.org/resource/combining-disciplines-rapid-appraisal-sondeo-approach>
- Holland, Jason. 2015. Rabobank: Seafood is world's most widely traded animal protein. Seafood Source. <http://www.seafoodsource.com/news/supply-trade/27854-rabobank-seafood-is-world-s-most-widely-traded-animal-protein>. 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. *Songklanakarinn Journal of Social Science and Humanities*. 22 p. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.487.8651&rep=rep1&type=pdf>
- Hossain, MS., S.R. Chowdhury, S. M. Abdul Jabbar, S.M. Saifullah, M. A. Rahman. 2008. Occupational Health Hazards of Ship Scrapping Workers at Chittagong Coastal Zone, Bangladesh. Chiang Mai University. 12 p. Available at [https://www.researchgate.net/publication/236015280\\_Occupational\\_Health\\_Hazards\\_of\\_Ship\\_Scrapping\\_Workers\\_at\\_Chittagong\\_Coastal\\_Zone\\_Bangladesh](https://www.researchgate.net/publication/236015280_Occupational_Health_Hazards_of_Ship_Scrapping_Workers_at_Chittagong_Coastal_Zone_Bangladesh)
- 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: <http://dx.doi.org/10.2984/67.3.5>. Available at <http://www.bioone.org/doi/full/10.2984/67.3.5>
- Lamug, C.B. 1996. Participatory Appraisal and Planning for Community Based Management Of Coastal Resources: A Philippine Case Study. Paper presented in the 6<sup>th</sup> 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](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 <https://www.iied.org/rra-notes-13-proceedings-bangalore-pra-trainers-workshop>
- 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 <http://www.participatorymethods.org/resource/introduction-rapid-rural-appraisal-agricultural-development>

- 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\\_Appraisal\\_in\\_the\\_Coastal\\_Ecosystem\\_of\\_Mt\\_Malindang\\_Misamis\\_Occidental\\_Philippines/links/53ef33d90cf23733e812d048/Participatory-Rural-Appraisal-in-the-Coastal-Ecosystem-of-Mt-Malindang-Misamis-Occidental-Philippines.pdf](https://www.researchgate.net/profile/Ephrime_Metillo/publication/264783864_Participatory_Rural_Appraisal_in_the_Coastal_Ecosystem_of_Mt_Malindang_Misamis_Occidental_Philippines/links/53ef33d90cf23733e812d048/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 <http://www.seararoundus.org/doc/Researcher+Publications/dpaul/2000/OtherItems/FishingDownAquaticFoodWebs.pdf>
- Pauly, D., V. Christensen, R. Froese and M.L. Palomares. 2000. Fishing down aquatic food webs. American Scientist, 88:46-51. Available at <http://www.seararoundus.org/doc/Researcher+Publications/dpaul/2000/OtherItems/FishingDownAquaticFoodWebs.pdf>
- 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-systems-version-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 [https://www.researchgate.net/publication/222573557\\_RAPFISH\\_A\\_Rapid\\_Appraisal\\_Technique\\_to\\_Evaluate\\_the\\_Sustainability\\_Status\\_of\\_Fisheries](https://www.researchgate.net/publication/222573557_RAPFISH_A_Rapid_Appraisal_Technique_to_Evaluate_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 <https://www.ncbi.nlm.nih.gov/pubmed/24090552>
- 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 <https://www.scribd.com/document/106286494/Art-of-the-Informal-Agriculture-Survey>
- 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 <https://academic.oup.com/ajae/article-abstract/65/2/463/54760?redirectedFrom=fulltext>
- Silvestre, G. and D. Pauly. 1997. Status and management of tropical coastal fisheries in Asia. ICLARM Conf. Proc. 53, 208 p. Available at <https://s3-us-west-2.amazonaws.com/legacy.seararoundus/researcher/dpauly/PDF/1997/Books%26Chapters/StatusMngtTropicalCoastalFisheries.pdf>
- Townsley, P. 1993a. A manual on rapid appraisal methods for coastal communities. Bay of Bengal Programme, Madras, India. Available at <http://www.arlis.org/docs/vol1/11799963/ad477e00.pdf>
- Townsley, P. 1993b. Training of Rapid Appraisal Teams; notes for trainers. FAO Fisheries Circular. No. 868. Rome, FAO. 1993. 115 p. Available at <http://www.chs.ubc.ca/archives/files/CHS0022.PDF>

- 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/VV2352E/VV2352E00.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 [http://library.enaca.org/mangrove/publications/pcra\\_training\\_guide.pdf](http://library.enaca.org/mangrove/publications/pcra_training_guide.pdf)
- USAID (United States Agency for International Development). 2012. Gender Equality and Female Empowerment Policy. Washington, DC, USA. 28 p. Available at [https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy\\_0.pdf](https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf)
- 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 <https://www.seafdec-oceanspartnership.org/resource/fisheries-catch-documentation-and-traceability-in-southeast-asia-a-conceptual-overview-cdt-101/>
- 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 <https://www.seafdec-oceanspartnership.org/resource/cdt201/>
- WorldFish. 2017a. Rapid Appraisal of Fisheries Management Systems in the Philippines: The Capture Fisheries Profile of Sarangani Bay /Annex 1. Los Baños, Laguna. 36 p.
- WorldFish. 2017b. Rapid Appraisal of Fisheries Management Systems in the Philippines: Socio-Economic and Value Chain Component Report /Annex 2. Los Baños, Laguna. 70 p. WorldFish. 2017c. Rapid Appraisal of Fisheries Management Systems in the Philippines: Fisheries Governance of Sarangani Bay-Celebes Seascape/Annex 3. Los Baños, 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 Baños, Laguna. 58 p.
- WorldFish. 2017e. Rapid Appraisal of Fisheries Management Systems in the Philippines: Stakeholder Validation Workshop Report /Annex 5. Los Baños, Laguna. 224 p.
- WorldFish. 2017f. Rapid Appraisal of Fisheries Management Systems in the Philippines: Final Integrated Report. Los Baños, 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 [http://www.crc.uri.edu/download/Cockle\\_PRA\\_Report.pdf](http://www.crc.uri.edu/download/Cockle_PRA_Report.pdf)

## 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 Hague, The Netherlands. Available at <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll1/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 [https://www.researchgate.net/publication/263247439\\_Socioeconomic\\_Monitoring\\_Guidelines\\_for\\_Coastal\\_Managers\\_in\\_Southeast\\_Asia\\_SocMonSEA](https://www.researchgate.net/publication/263247439_Socioeconomic_Monitoring_Guidelines_for_Coastal_Managers_in_Southeast_Asia_SocMonSEA)
- 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 <http://www.fao.org/docrep/005/Y4470E/y4470e00.htm>
- IIRR (International Institute of Rural Reconstruction). 1998. Participatory methods in community-based coastal resource management. Volume I- Introductory Papers. Silang, Cavite, Philippines. Available at <http://www.nzdl.org/gsd/mod?e=d-00000-00---off-0envl--00-0---0-10-0---0---0direct-10---4-----0-11--11-en-50---20-about---00-0-1-00-0--4---0-0-11-10-0utfZz-8-00&cl=CL2.2&d=HASHd8b92d1f868a33e9d63b61.9&gt=1>
- 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 <http://www.participatorymethods.org/resource/introduction-rapid-rural-appraisal-agricultural-development>
- Mikkelsen, B. 1995. Methods for development work and research: a guide for practitioners. Sage Publications, London. Available at <http://agris.fao.org/agris-search/search.do?recordID=XF2015012894>
- 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. <https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systems-version-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. 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 <http://www.reefresilience.org/wp-content/uploads/Pomeroy-et-al.-2013-CT-Regional-EAFM-Guidelines.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.
- 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 <http://www.fao.org/tempref/Fl/CDrom/aquaculture/a0845t/volume2/docrep/008/ad780e/AD780E00.htm>

Townsley, P. 1993a. A manual on rapid appraisal methods for coastal communities. Bay of Bengal Programme, Madras, India. Available at <http://www.fao.org/tempref/docrep/fao/field/006/ad477e/ad477e00.pdf>

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. <https://www.sciencedirect.com/science/article/pii/0024630185902018>

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](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](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 <https://www.worldfishcenter.org/content/handbook-rapid-appraisal-fisheries-management-systems-version-1>

- 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 <http://www.seafdec.org/download/fish-people-volume-14-no-2/>
- 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 [https://www.researchgate.net/publication/263685472\\_Sharpening\\_the\\_Focus\\_of\\_Force\\_Field\\_Analysis](https://www.researchgate.net/publication/263685472_Sharpening_the_Focus_of_Force_Field_Analysis)
- Thomas J. 1985. Force Field Analysis: A New Way to Evaluate Your Strategy. *Long Range Planning*. 18 (6): 54-59. Available at <https://www.sciencedirect.com/science/article/pii/0024630185900640>
- 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 <https://www.seafdec-oceanspartnership.org/resource/fisheries-catch-documentation-and-traceability-in-southeast-asia-a-conceptual-overview-cdt-101/>
- 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 <https://www.seafdec-oceanspartnership.org/resource/cdt201/>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2018a. CDT Gap Analysis and Partnership Appraisal for Malaysia. Bangkok, Thailand, 97p. Available at: <https://www.seafdec-oceanspartnership.org/resource/vietnam-cdt-gap-analysis-and-partnership-appraisal/>
- USAID Oceans (The USAID Oceans and Fisheries Partnership). 2018a. CDT Gap Analysis and Partnership Appraisal for Vietnam. Bangkok, Thailand, 38p. Available at: <https://www.seafdec-oceanspartnership.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 [https://www.seafdec-oceanspartnership.org/wp-content/uploads/USAID-Oceans\\_Stakeholder-Validation-Workshop-Proceeding\\_Philippines\\_final\\_LR.pdf](https://www.seafdec-oceanspartnership.org/wp-content/uploads/USAID-Oceans_Stakeholder-Validation-Workshop-Proceeding_Philippines_final_LR.pdf)

#### **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 <http://www.fao.org/docrep/014/ba0004e/ba0004e00.pdf>

- 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](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 42<sup>nd</sup> 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 <http://www.fao.org/3/a-i7419e.pdf>
- 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 <http://www.fao.org/3/a-mo943e.pdf>
- 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 [http://pubs.iclarm.net/resource\\_centre/WF-3896.pdf](http://pubs.iclarm.net/resource_centre/WF-3896.pdf)
- IGWG. 2016. Defining Gender and Related Terms. Interagency Gender Working Group, USAID. <https://www.igwg.org/wp-content/uploads/2017/05/DefinGenderRelatedTerms.pdf> (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 <https://searchworks.stanford.edu/view/2897164>
- 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 <https://onlinelibrary.wiley.com/doi/abs/10.1111/faf.12075>
- Koehler, G. 2016. Tapping the Sustainable Development Goals for progressive gender equity and equality policy? *Gender & Development*. DOI: 10.1080/13552074.2016.1142217.
- Krushelnyska, O. 2015. Toward Gender-Equitable Fisheries Management in Solomon Islands. A synthesis report from a study by Barclay, Payne and Mauli, 2015. Available at <http://documents.worldbank.org/curated/en/467721468187800125/Toward-gender-equitable-fisheries-management-in-Solomon-Islands>
- 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 <https://policy-practice.oxfam.org.uk/publications/a-guide-to-gender-analysis-frameworks-115397>
- 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](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 <https://www.taylorfrancis.com/books/9781134935383>
- 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=Y0dSbUx6QTFOREEZTURrd0IERTFNVFE0Tmjd05ERXVjRlJt&dldname=VWomens%27s%20Space%20in%20the%20Fish%20Port%20Tambler%20Complex%20and%20the%20Value-Chain%20Nodes%20of%20the%20Fishing%20Industry%20in%20General%20Santos%20City.%20Philippines.pdf>
- 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-systems-version-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 <https://www.popline.org/node/338985>
- 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-bnc-idrc.dspace.direct.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. Nandeeshia and M. Sunderarajan. (2002). Women in Fisheries in Asia. Global Symposium on Women in Fisheries, 6<sup>th</sup> 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. Nandeeshia, 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 [https://books.google.com.ph/books/about/International\\_Symposium\\_on\\_Women\\_in\\_Asia.html?id=XbZgA4mDLF8C&hl=en&output=html\\_text&redir\\_esc=y](https://books.google.com.ph/books/about/International_Symposium_on_Women_in_Asia.html?id=XbZgA4mDLF8C&hl=en&output=html_text&redir_esc=y)
- 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 [http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Sustainable%20Energy/Gender\\_Mainstreaming\\_Training\\_Manual\\_2007.pdf](http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Sustainable%20Energy/Gender_Mainstreaming_Training_Manual_2007.pdf)
- 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\\_RES\\_70\\_1\\_E.pdf](http://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_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 <https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf>

- 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://usaidthestarter.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 <http://ndcpartnership.org/content/tips-conducting-gender-analysis-activity-or-project-level>
- USAID (United States Agency for International Development). 2012. Gender Equality and Female Empowerment Policy. Washington, DC, USA. 28 p. Available at [https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy\\_0.pdf](https://www.usaid.gov/sites/default/files/documents/1865/GenderEqualityPolicy_0.pdf)
- 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 <https://www.usaid.gov/sites/default/files/documents/1870/205.pdf>
- 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](https://doi.org/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 <https://www.asianfisheriessociety.org/publication/downloadfile.php?id=1109&file=Y0dSbUx6QXhNekl3TXpjd01ERTBOemczTXprMk1qZ3VjR1Jt&dldname=How%20are%20Fisheries%20and%20Aquaculture%20Institutions%20Considering%20Gender%20Issues?.pdf>
- 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 [http://envirodm.org/cms/wp-content/uploads/2017/07/WWF-Flood-Green-Guide-2017\\_Preface\\_Optimized.pdf](http://envirodm.org/cms/wp-content/uploads/2017/07/WWF-Flood-Green-Guide-2017_Preface_Optimized.pdf)
- 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](https://ir.library.oregonstate.edu/concern/conference_proceedings_or_journals/s7526d31k)