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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

A Formative Assessment of the
USAID/Ghana SFMP
Gender Mainstreaming Strategy



JUNE 2015

THE
UNIVERSITY
OF RHODE ISLAND
GRADUATE SCHOOL
OF OCEANOGRAPHY



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Citation: Bilecki, D. Torell, E. Owusu, A. (2018). A Formative Assessment of the USAID/Ghana SFMP Gender Mainstreaming Strategy. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island and Hen Mpoano: Takoradi, Ghana .GH2014_GEN025_CRC. 66 pp.

Authority/Disclaimer:

Prepared for USAID/Ghana under Cooperative Agreement (AID-641-A-15-00001), awarded on October 22, 2014 to the University of Rhode Island, and entitled the USAID/Ghana Sustainable Fisheries Management Project (SFMP).

This document is made possible by the support of the American People through the United States Agency for International Development (USAID). The views expressed and opinions contained in this report are those of the SFMP team and are not intended as statements of policy of either USAID or the cooperating organizations. As such, the contents of this report are the sole responsibility of the SFMP team and do not necessarily reflect the views of USAID or the United States Government.

Cover photo: Man and Women Working Together in the Densu Delta (Credit: Danielle Bilecki)

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Resonance Global: <https://resonanceglobal.com/>
SNV: <http://www.snvworld.org/en/countries/ghana>

ACRONYMS

CEWEFIA	Central and Western Region Fishmongers Improvement Association
CLaT	Child Labor and Trafficking
CRC	Coastal Resources Center at the University of Rhode Island
DAA	Development Action Association
DAASGIFT	Daasgift Quality Foundation
DOPA	Densu Oyster Pickers Association
FAO	Food and Agriculture Organization
FC	Fisheries Commission
FEU	Fisheries Enforcement Unit
FON	Friends of Nation
HM	Hen Mpoano
ICFG	Integrated Coastal and Fisheries Governance
IR	Intermediate Results
IUU	Illegal, Unreported, and Unregulated (Fishing)
GNCFC	Ghana National Canoe Fishermen's Council
GSO	Graduate School of Oceanography, University of Rhode Island
M&E	Monitoring and Evaluation
MSMEs	Micro, Small and Medium Scale Enterprises
MoFAD	Ministry of Fisheries and Aquaculture Development
NAFPTA	National Fish Processors and Traders Association
OCA	Organizational Capacity Assessment
SFMP	Sustainable Fisheries Management Program
SNV	Netherlands Development Organization
SSG	SSG Advisors
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	United States Agency for International Development
VSLA	Village Savings and Loans Association
USG	United State Government

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EXECUTIVE SUMMARY

Women account for nearly half of the fisheries work force in Ghana. Aside from going to sea to fish, women are engaged in every single step of the fisheries value chain. Acknowledging the important, but largely invisible role that women play in the fisheries sector, the US Agency for International Development (USAID) funded Ghana Sustainable Fisheries Management Project (SFMP) which developed and implemented a gender mainstreaming strategy. SFMP developed its gender mainstreaming strategy to increase fisheries management equity and efficiency – maintaining that if both men and women demand better fisheries management practices, implementation will be timelier, more enduring, and more effectively diffused. The strategy also maintained that engaging women in the fisheries sector will contribute to building broader constituencies for sustainable fisheries management. Implementing the strategy, SFMP has shown that women can be leaders, advocates, and decision-makers in the fisheries sector. The project did this by developing capacity, building leadership, enhancing knowledge, and strengthening the livelihoods among post-harvest processors. The project's gender mainstreaming actions targeted a broad range of fisheries stakeholders, including fishers and fish processors, fisheries organizations, local non-governmental organizations, and the Ministry of Fisheries and Aquaculture Development (MoFAD). A key policy accomplishment was the adoption of the Fisheries Sector's National Gender Mainstreaming Strategy in 2016.

This report presents the findings of an assessment conducted to gauge the impacts of SFMP's gender mainstreaming strategy. The assessment is based on document review as well as qualitative data collection (focus groups and key informant interviews) conducted in June 2018. Results indicate that SFMP's activities have brought about positive changes in the way project beneficiaries perceive women's role in fisheries, how SFMP's female beneficiaries feel about themselves and their role in the sector, how partner organizations relate to women in fisheries, and how partner organizations operate. Comparing the achievements in relation to the timeframe (3 years), it is clear that the project has been successful in moving the needle on gender mainstreaming.

The gender impact assessment found that women who have participated in SFMP's gender mainstreaming activities are more confident, knowledgeable and empowered to speak up. Furthermore, men recognize that it is time to acknowledge the role that women play in the fisheries sector. Capacity development sessions related to innovation, conflict management, advocacy, and leadership have contributed to women's perception that they have a voice in fisheries management. Women have been exposed to sustainable fisheries management and are equipped with the knowledge and leadership skills to advocate for good fisheries practices. Women are able to discuss fisheries management, including the importance of closed seasons and other measures. Trainings in post-harvest processing have helped women handle fish more hygienically whereas trainings in business management and financial literacy have provided tools to enable women to grow their processing enterprises.

Summarizing the impact on local organizations, SFMP's gender strengthening efforts have had an impact on the staff's attitudes towards women and women's engagement in fisheries. Gender mainstreaming efforts have succeeded in challenging cultural norms about women's role in fisheries as well as in the work place.

The gender impact assessment delved deeper into the Densu Oyster Pickers Associations (DOPA), which has been able to implement a participatory management process that includes a closed season for oysters. The Densu Estuary case is a success story within SFMP's broader gender mainstreaming effort. Multiple factors have contributed to the success, including the

fact that DOPA is a relatively small and cohesive group, which meant that it was easier to reach a critical mass and consensus. Another success factor was the participatory management and monitoring approach, which increased scientific knowledge, confidence, leadership, and the ability to advocate. Finally, DOPA worked with passionate and engaging extension staff, whose energy rubbed off on the local stakeholders.

After four years of implementation, SFMP is still in the beginning of the process of diffusing gender mainstreaming into the Ghanaian fisheries sector. The next step will be to move from gender “mainstreaming light” to deeper and more far reaching gender mainstreaming results. The gender assessment has provided a number of recommendations for how this can be achieved:

1. Broaden the participation of women in fisheries management by ensuring that non-leaders/elders/dignitaries are invited to and are capable of attending project activities. Put systems in place to make sure that the truly committed, not just the distinguished, are invited to events.
2. Identify and work with champions that will have the resources and the staff to continue implementation over time to reduce reliance on project-based funding.
3. Be clear that gender mainstreaming requires the involvement of both women and men. Women are involved in almost every node of the fisheries value chain and they are disproportionately burdened with managing household economics. By taking a “men as partners” approach, it may be possible to increase men’s support and reduce the additional burdens that may come about as women engage more in the fisheries sector.
4. Increase the involvement of traditional fisheries leadership structures, including the chief fishmonger/processor, or *Konkohema*. These leaders may have an untapped potential to lead, manage, and mobilize their communities.

1.0 INTRODUCTION

1.1 The Sustainable Fisheries Management Project

The objective of the USAID/Ghana Sustainable Fisheries Management Project (SFMP) is to rebuild this key food source by putting an end to overfishing. The SFMP is a five-year project (October 2014-October 2019) that aims to end overfishing and stop the collapse of key stocks important to local food security. The project intends to reach its goal by achieving the following intermediate results:

IR 1: Strengthened Enabling Environment for Marine Resource Governance

IR 2: Science and Research Applied to Policy and Management

IR 3: Creating Constituencies and Stakeholder Engagement

IR 4: Applied Management

IR 5: Gender

IR 6: Public-Private Partnerships

IR 7: Capacity Development of Targeted Institutions

The SFMP approach includes a premise that sustainable fisheries management in Ghana can best be attained when all user groups and stakeholders, both women and men, are included in management decision making at both the national and local levels. In the past, women have not been included in fisheries management decision making in a meaningful way. Making sure women's voices are articulated, heard and included in decisions is an important part of SFMP's strategy. In addition, the project has a strong focus on post-harvest improvements in the value chain benefiting micro and small scale women processors and marketers that dominate this sub-sector.

In order for women to participate in fisheries management, or hold positions of leadership, they must be engaged in the process. However, women's participation is often constrained by time (the result of household and reproductive responsibilities), education (literacy), access to capital, cultural rules, and discriminatory laws, among other barriers (Matsue et al, 2014; FAO, 2015). Because of this inequity, international development and donor agencies such as the Food and Agriculture Organization of the United Nations (FAO) and the United States Agency for International Development (USAID) require that their development projects mainstream gender (USAID, 2012; FAO, 2015).

SFMP has worked to ensure gender equitable participation in project activities as well as promoted gender mainstreaming and empowerment in the fisheries sector. In the first year, the project conducted a gender analysis and needs assessment which led to the development of a gender mainstreaming strategy. Implementation of this strategy began in Year 2. This report provides an assessment of the results to date and impact from the gender mainstreaming strategy and outlines some recommendations for the future. As SFMP is entering its final year and winding down its on-the-ground activities after the first six months, this report's recommendation may be most useful for subsequent fisheries interventions that seek to mainstream gender into their programming.

1.2 The SFMP Gender Analysis and Mainstreaming Strategy

Women are believed to represent 47% of the fisheries workforce in developing countries (Pomeroy and Andrew, 2001). In Ghana this figure holds true, as women account for nearly half of the fisheries work force (Torell et al, 2015). Aside from going to sea to fish, women are engaged in every single step of the fisheries value chain. However, they are especially

well represented in the post-harvest sector. In this paper the men who go to sea will be called fishers, and the women of the fisheries sector who add value to the catch through smoking, drying, salting and filleting, will be referred to as processors. In addition to processing, women engage in the fisheries sector by investing in canoes and other gears. Some women also finance fishing trips and fishing gears maintenance, and some give loans to husbands and other fishermen (Torell et al, 2015). Many women also fish by gleaning estuarine areas for shellfish and mollusks. These women's fisheries are typically not included in government statistics. That means that they are not counted as fisherfolk and their catch is not incorporated into official statistics. Hence, even if it is an important fishery for food security it is invisible in current statistics.

The income generated through women's production, transformation, and marketing of fish is vital for supporting the entire fishing industry (Britwum, 2009). While SFMP is not the first fisheries related development project in Ghana, its gender focus is unique. Previous projects, such as CRC's Hen Mpoano project also known as The Ghana Integrated Coastal and Fisheries Governance (ICFG) Project had gender dimensions, but no defined strategy for integrating a gender lens into the project as a whole (Snyder, 2010).

As with many aid projects, ICFG reached women in fishing communities mainly through diversified livelihoods activities (dressmaking and hair dressing) and through reproductive health and child nutrition workshops (CRC, 2014). Learning from ICFG, SFMP's gender mainstreaming strategy is the result of understanding the deficiency of women's voices in previous projects and fisheries management in general. The ICFG project's final report stated *"The important role of women engaged in fisheries value chains through buying, processing and related small businesses needs much greater attention. Women fish mongers have key responsibilities but little voice in fisheries management decisions, and their economic contributions are hampered..."* (CRC, 2014). While women's participation in decision-making processes, even those that directly impact their livelihoods, continues to be restricted, SFMP's gender mainstreaming strategy hopes to make progress in rectifying this imbalance (Okyere Nyako et al, 2015a).

Gender mainstreaming means making sure gender perspectives are considered while planning, implementing, monitoring, and evaluating a project. The idea for gender mainstreaming was first implied in the 1985 UN Conference on Women in Nairobi. The final report from the meeting states *"Women should be an integral part of the process of defining aims and shaping development ...Organizational and other means which enable women to contribute their interests and preferences into the evaluation and selection of alternative development goals should be identified"* (UN 1986). Gender mainstreaming as a strategy was first formally featured in the 1995 UN Conference on Women in Beijing. While the term "gender mainstreaming strategy" was never explicitly referred to, the final document from this conference aptly describes the concept as it is known today: *"Governments and other actors should promote an active and visible policy of mainstreaming a gender perspective in all policies and programs so that before decisions are taken, an analysis is made of the effects on women and men, respectively"* (UN 1996).

As a result of the proliferation of gender mainstreaming strategies in development projects, there is a vast array of research on gender, natural resource management, and international development. These studies work to demonstrate the best ways for aid projects to engage both men and women in environmental management. As a result of this collective experience, SFMP developed a Gender Needs Assessment in 2014, a Gender Analysis in June of 2015, and a Gender Mainstreaming Strategy in July of 2015 (definitions for which can be seen in the box above). These studies and publications were created in order to ensure SFMP worked successfully with both men and women to promote ecosystem-based

and adaptive management approaches. Additionally, in 2016 the project produced a Gender Mainstreaming Training Manual to instruct partner organizations on SFMP's gender mainstreaming strategy, and by November of 2016 after two years of work with SFMP, MoFAD had developed and formally adopted as policy their own National Gender Mainstreaming Strategy for the Fisheries Sector (Torell et al, 2016; MoFAD, 2016).

The multifaceted nature of SFMP's gender mainstreaming strategy can be seen below in Figure 1 as a results chain, which is the output of a USAID Washington supported workshop held in 2017 (Schuttenberg and Torrens-Spence, 2017). This workshop was convened halfway through the project in order to test the application of USAID's new approach to programming by developing a situational analysis and an associated Theory of Change with results chains for each intermediate result area of the project. In the simplest terms, the results chain depicts the project strategy, which suggests that SFMP should work to empower women and their associations, and change processing and business practices in order to reduce illegal fishing and increase support for fisheries management measures to reduce fishing effort. At the same time, creating value addition is a means to improved economic wellbeing and livelihoods of women processors.

SFMP's Gender Mainstreaming Strategy Definitions

Gender: The term gender refers to culturally based expectations of the roles and behaviors of men and women. The term distinguishes the socially constructed from the biologically determined aspects of being male and female. Unlike the biology of sex, gender roles and behaviors, and the relations between women and men (gender relations) can change over time, even if aspects of these roles originated in the biological differences between sexes.

Gender Analysis: Is an analytic social science tool that is used to identify, understand, and explain gaps between males and females that exist in households, communities, and countries, and the relevance of gender norms and power relations in a specific context.

Gender needs assessment: is defined as the identification and analysis of the needs of men and women and the impact an intervention is likely to and/has on the men and women.

Gender mainstreaming: Is defined as the process of assessing the implications for women and men of any planned action, including legislation, policies or program,

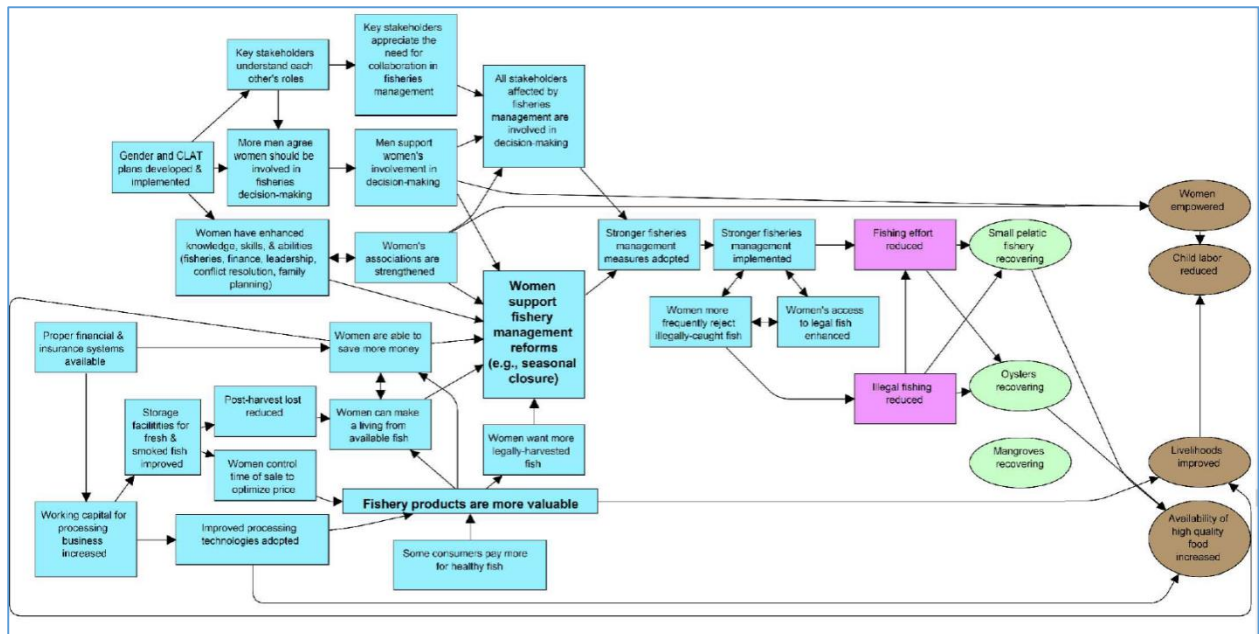


Figure 1. Results Chain for IR 5 (Schuttenberg and Torrens-Spence, 2017)

More broadly, SFMP's theory of change and gender mainstreaming strategy indicate that engaging women in the fisheries sector is an important aspect of building powerful constituencies that demand a well-managed fisheries sector. The theory believes the root of this engagement lies in stakeholders knowing their roles, or bringing attention to the large, but invisible role that women play in the Ghanaian fisheries sector (Bennett, 2005). The next step in the chain of results is to have both men and women realize that as key members of the sector, women are also key decision makers. Therefore, the project aimed to give women the tools they need to become leaders advocating for fishery management reforms. Concurrent to all of this support and capacity development, SFMP's theory of change implies that the economic well-being of fish processors is also important to the ecological goals of more sustainable fisheries.

2.0 METHODS

Gender mainstreaming strategies are devised to cut across all levels of a project's design, implementation, and monitoring and evaluating (Daly, 2005). As SFMP entered its fourth year of implementation in June of 2018, a qualitative interview based assessment of the project's gender mainstreaming strategy and expected results was undertaken. The objective was to gauge the impacts of SFMP's gender mainstreaming strategy on the many different tiers of Ghana's fisheries sector, and the many different levels of the project itself. This includes impacts on fishers and fish processors, fisheries organizations, SFMP's partner organizations (NGOs, governmental organizations, and educational institutions), and certain aspects of the Ministry of Fisheries and Aquaculture Development (MoFAD).

2.1 Document analysis and literature review

The gender mainstreaming assessment started a few months prior to the interviews themselves with an in depth content analysis and summary of documents relating to SFMP and gender mainstreaming. These documents (see Appendix B) included peer reviewed literature, grey papers, and written policies both drafted and published. The assessment team was made up of members of SFMP's Accra office, Hen Mpoano's Takoradi office, and the CRC's Narragansett office. The assessment began with a document analysis to help the

research team understand the scope of the gender strategy and reveal how the mainstreaming impacts and goals may have changed over the timespan of the project.

2.2 Field Data Collection

Qualitative data was collected via semi-structured interviews with key informants and focus group guided discussions, which are summarized in Table 1 below. As Table 1 demonstrates, individual interviews took place with members of SFMP's partner organizations. These organizations can be broken up into two different categories:

1. **Implementing partners** include; Development Action Association (DAA), Central and Western Region Fishmongers Improvement Association (CEWIFIA), Netherlands Development Organization (SNV), SSG (SSG Advisors Incorporated), Hen Mpoano, Friends of the Nation (FON), and Dassgift. These are organizations that have sub-recipient agreements with SFMP to implement certain project activities in their areas of expertise and geographic focal areas.
2. **Client organizations and individuals** include; National Fish Processors and Traders Association (NAFPTA), Densu Oyster Pickers Association (DOPA), Ghana National Canoe Fishermen's Association (GNCFC), The University of Cape Coast (UCC) and MOFAD/Fisheries Commission (FC).

Table 1. Field Data Collection Methods

Type	Description	Frequency
Key Informant Interviews	These painted a picture of how employees of organizations that work with the project feel the gender mainstreaming strategy works, and what impacts it has had on the Ghanaian fisheries sector.	13 people from Implementing Partners 11 people from Client Organizations
Focus Groups	These were held with fishers and processors, and demonstrate impacts the gender mainstreaming strategy has had on members of fishing communities.	6 Communities/Groups 210 Individuals
Direct Observation	Apart from information obtained from interviewees, direct observation played an important role in confirming what was being discussed as well as identifying other interesting topics to questioned.	Not Applicable

While all of these organizations have been the beneficiaries of some capacity development through SFMP, partner organizations work with the program on an institutional level to develop and implement activities, while client organizations are beneficiaries of SFMP activities. Individuals included members of fishing communities that have participated in trainings, meetings, or business development service opportunities and other events of SFMP but may not be employees of the specific associations mentioned above

2.3 Key Informant Interviews

As recommended by Galleta and Cross (2013) the assessment team began each interaction with a statement of purpose, and an expression of gratitude for the participants' involvement. The early part of the interview was used for broad open ended questions, that aimed to elicit a

central story and data the team could not anticipate in advance. The middle segment of the interview shifted to more specific questions related to SFMP's gender mainstreaming strategy, concluding with more theoretical questions and considerations working towards a sense of "wrapping up."

The research team crafted unique semi-structured "questionnaires" for each organization, which can be found in Appendix A. While these questions differ by organization, much of their content is uniform across all questionnaires. The variations in questions pertain only to the differences in SFMP based activities for each organization.

2.4 Focus Groups

Focus groups had a similar structure to the key informant interviews, though they started with a prayer and were interspersed with songs sung by the participants when they needed to re-center themselves or wake up a little. Focus groups were organized by Hen Mpoano and were comprised of fishermen and fish processors who had been the beneficiaries of at least one SFMP activity. Focus groups were held in Axim, Elmina, Moree, Shama, Ankobra, and with members of the Densu Delta Community. Half of the focus groups were made up entirely of women, whereas the other half was made up of at least 50% women. Each focus group was made up of 30-40 individuals. Focus group questions remained the same across all six communities, though there were additional questions asked of those members of the Densu Oyster Pickers Association. These questions can also be found in Appendix A.

3.0 RESULTS

3.1 Document Analysis

Before implementing any activities, SFMP created its "Report on the Baseline Survey of Small Pelagic Fishing Households along the Ghana Coast" which can be found in Appendix B (Crawford et al, 2016). After this initial task SFMP has implemented a number of gender oriented activities in fisheries management based on the gender mainstreaming strategy. For example, as part of SFMP's strategy to empower women in fisheries management, a number of gender leadership, conflict management and team building trainings were conducted in the Western and Central regions for 151 women. These leadership training for fish processing groups were facilitated by selected women leaders from the various local groups who benefited from earlier trainings in leadership and conflict management. The peer approach used for the training empowered and enhanced social cohesion among the trainees (CRC, 2018b). Other examples of SFMP activities that have empowered women include the following:

To mobilize women voices for improved fisheries management, SFMP has provided ongoing training to women leaders in fishing communities. In addition to directly training women to participate, SFMP has also provided training-of-trainer's workshops on gender leadership and conflict management to multiply efforts to reach more women. One such workshop was organized for 26 women leaders in the Western and Central regions affiliated with DAA, CEWEFIA and NAFPTA.

Gender is an important cross cutting theme for SFMP. Many gender activities are now mainstreamed into the other IRs such as capacity development of women fish processor organizations, micro-finance targeted at women-owned Micro, Small, and Medium Enterprises (MSMEs), business skills development and VSLAs primarily geared towards women-owned MSMEs (fish processors), community-based management and use rights for women oyster harvesters in the Densu Estuary (IR 7 and 4). For more information on how SFMP has mainstreamed gender in IR 7, please refer to Kent's "Organizational Capacity

Assessment Report for Government and Public University Units,” which can be found in Appendix B (Kent, 2015). For more information about SFMP’s work and impact of their activities with MSMEs that had a primary clientele of women owned businesses, please refer to “MSMEs/VSLAs Formative Evaluation Report,” which can be found in Appendix B (McNally et al, 2018). Additionally, provisions in a co-management policy submitted to the MOFAD for approval (developed under IR-1 and developed with SFMP support) requires women inclusion on co-management committees while not precluding them from leadership roles as committee chairpersons as compared to previous practice.

There are several reports worth noting that SFMP has produced which have helped shed light on women’s role in the fisheries sector and challenges they face. There is rich information in the project’s baseline data found in the report referenced in Appendix A (Crawford et al, 2016) concerning women’s empowerment and other socioeconomic and demographic characteristics. In addition, a survey of Child Labor and Trafficking also identified that poor single female headed households with large numbers of dependents and the most vulnerable households susceptible to child trafficking (Friends of the Nation, 2015). These reports demonstrate how SFMP has been very careful to consider gender and women’s challenges and concerns in issue analysis that has then influenced the design of project interventions.

Below is a table that summarizes the project’s performance targets through Year 4 (FY18) that are particularly related to the project’s gender mainstreaming strategy and activities.

Table 2. SFMP’s Gender Related Strategies and Activities

Intermediate Result and No.	Indicator	Description	Cumulative Results
1: Policy	Densu Delta Management Plan	A management plan for the primarily women oyster harvesters of the Densu Delta has been submitted to MOFAD	Target to be met
	Gender Strategy	A Gender Strategy for the MOFAD, has been accepted and implemented.	Target met already
4: Applied Management	Number of MSMEs receiving business development services from USG assisted sources	The number of men and women trained in business skills like bookkeeping.	Total- 4,224 M- 511 (12%) F – 3713 (88%)
	Value of agricultural and rural loans as a result of USG assistance	The amount of money in loans given to men and women	Total – \$57,350 M - \$0 (0%) F - \$57,350 (100%)

Intermediate Result and No.	Indicator	Description	Cumulative Results
	Number of MSMEs, including farmers, receiving agricultural related credit as a result of USG assistance	The Number of male and female business owners receiving credit	Total – 305 M – 0 (0%) F – 305 (100%)
7: Capacity Development ¹	Number of members of producer organizations and community based organizations receiving USG assistance	The number of people, both men and women, who are members of organizations receiving assistance from the program	Total – 4,994 M – 826 (17%) F – 4168 (83%)
	Number of individuals who have received USG-supported degree-granting agricultural sector productivity or food security training	The number of people, both men and women, who have received a degree in a field related to food security	Total – 5 M- 1 (20%) F – 4 (80%)
Cross Cutting Indicators	Number of people receiving USG supported training in natural resources mgmt. and/or biodiversity conservation, and climate change, disaggregated by gender	The number of men and women who have received training in natural resource management	Total – 6,335 M – 3361 (53%) F – 2974 (47%)

3.2 Literature Review

Literature shows that it is very difficult to get people in the fisheries sector to change occupations, or just stop fishing (Cinner et al. 2009). In order to effectively decrease total fish catch and increase fish biomass, SFMP works to change the behavior of people involved in the fisheries sector. This means changing the supply and demand for fish, and it involves fishers, processors, traders, policy makers, and consumers.

As stated by Rogers, 1995 “*Getting a new idea adopted, even when it has obvious advantages, is often very difficult.*” Changing an individual’s behavior so that they will adopt a new technology or idea is a highly complex action for a person, group of individuals, or organization to take. SFMP’s theory of change, results chain, and series of project activities are designed to consider this complexity, and work towards behavior change.

Speeding up the rate at which an innovation permeates through a group (in this case the fisheries sector of Ghana) is an even more complex campaign. Again, SFMP’s theory of

¹ Note: By Year 5 of SFMP, progress reports no longer indicate success in “Intermediate Result 5: Gender.” This is because Gender is now regarded as a cross-cutting indicator, the results of which can be found integrated within the other IRs.

change is rooted in the diffusion of innovations literature, which demonstrate that once a critical mass of adoption is reached, innovations are not only more likely to proliferate through a group, but are also more likely to endure. The literature defines critical mass as the point at which “*enough individuals have adopted an innovation so that the innovation’s further rate of adoption becomes self-sustaining*” (Rogers, 1995).

In order to understand how to reach critical mass, research shows that in any group, you can categorize potential adapters of an innovation (better managed fisheries) into innovators, early adopters, early majority, late majority, and laggards. These groups are represented in Figure 2. By reaching the early majority, it will be easier for new innovations to proliferate and endure, than if only innovators are reached. Thus, one way to gauge the impact of SFMP’s gender mainstreaming strategy is to look at what percentage of the sector the project has not only reached, but has made to change their behavior.

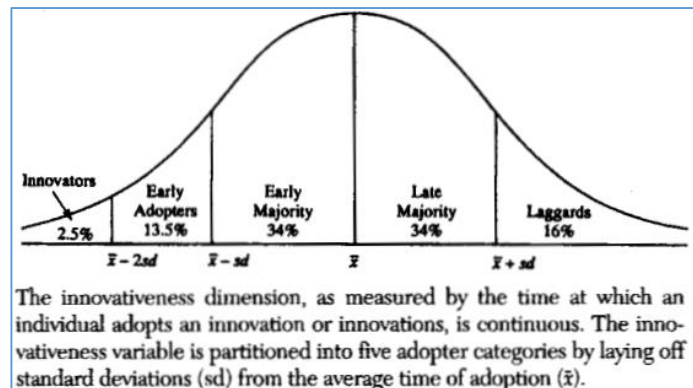


Figure 2. Adopter Categorization on the Basis of Innovativeness (Rogers, 1995)

As previously stated, one of the ways SFMP intends to reach a critical mass of Ghanaians demanding a better managed fishery is to reach out to the women in the sector. In West Africa, women’s work and role in fisheries management and the development process of fisheries have been overlooked (Bennett, 2004). Additionally, the exclusion of women and gender analyses from fisheries research has impeded a full understanding of fisheries ecological systems, as well as the links between ecology and society (Klieber et al, 2015). As can be seen in the content analysis above, SFMP intended to address this shortcoming by implementing a gender mainstreaming strategy.

SFMP developed its gender mainstreaming strategy to increase equity as well as efficacy. The project’s theory of change indicates that adding women’s voices to the mass of stakeholders demanding change will lead to a timelier, more enduring fisheries management system, where good management practices are more effectively diffused. The idea of giving women a voice in natural resource management is not new, though it is quite contentious.

After the West’s “counter-culture” movement of the 1970s, many activist circles, NGOs, and non-profits took to idealizing certain “earth-mother” mythologies. In the 1980s, international aid projects appealed to donors by maintaining that women and nature have unique relationship because both entities give and nurture life (Leach, 2007). The great variety of aid projects of the time also implied that because women in the global south spend so much time gathering from the natural environment, they are special victims of environmental degradation, and must then be environmental care givers and “*key fixers of environmental problems*” (Leach, 2007). By the 1990s, critiques of this ideal began to bring to light the double or triple burden this placed on already burdened women.

Opponents of the idealized “ecofeminism”, point out that policies that focus on championing gender in order to stop environmental degradation are “marketising” women. They are using a gender that is already generally a prime care-taker in the home, and in many instances a gender that has been mainstreamed into income generating activities, to save the environment (Matsue et al, 2014, Bennet, 2005). Many programs added an economic and environmental

responsibility onto an already marginalized group of people, whether they had the resources and capacity to deal with that responsibility or not (Leach, 2007).

With critiques came new and more ethical ideas of gender and environmental management. Effectively mainstreaming gender no longer means just making sure women are involved in development. Rather it incorporates the wisdom, participation, and opinions of women as well as men. Comprehensive development policies must move beyond “ticking boxes and numbers to changing attitudes and contexts,” (Bennett, 2005). It means being mindful of development activities and their implications in relationships between men and women.

With regards to mindfulness and gender strategies, Daly (2005) suggests that there are three different types of gender mainstreaming.

1. In its best iteration, gender mainstreaming is fully integrated, meaning that gendered perspectives are maintained throughout an entire project. Gender equality is not the burden of a few “gender experts” but is instead the responsibility of most if not all actors involved, and is embedded across all institutions.
2. “Mainstreaming light,” or the middle ground of strategies, the responsibility of gender has been spread out and involves different organizations, departments, and ministries, but is still not a universal duty. There are still “gender specialists,” and those who feel no obligation to work towards gender equity, since it is not in their job description.
3. In its most fragmented form, gender mainstreaming strategies are confined to certain policies, or specific programs within any given domain. Pieces of programs, activities, and policies involve gender equity, but there is no universality or master framework. Here, mainstreaming is usually new, and lacks breadth and depth.

SFMP has fully integrated some of its IR’s and many of its activities have mainstreamed gender. However, some components of SFMP rely upon “gender specialists/champions” to burden the responsibility of equity, and a sustainably managed fishery, as seen in the results section, and discussed below. Further, recommendations have been made for similar projects moving forward, using the lessons learned from this formative assessment.

To date there are hundreds of different publications written by SFMP and partner organizations and several of them allude to the impacts the project’s gender mainstreaming strategy. The research presented in this report was designed to qualitatively assess changes “on the ground.” The assessment will help tell a more comprehensive story of how the gender mainstreaming strategy has affected the many tiers of the fisheries sector. Below is a description of the study’s results.

3.3 Key informant interviews and focus groups

3.3.1 What does gender mainstreaming mean to you?

The first question in the individual interviews with members of partner organizations was “What does gender mainstreaming mean to you?” The same question was reworked in order to suit the focus group audience, and was investigated by asking beneficiaries “Have you ever been involved in any gender trainings?” followed by a prompt to describe what happened in those trainings. The goal was to solicit an unbiased explanation of what these terms meant to the participants. The assessment intended to investigate how the participants understood gender or gender mainstreaming. This was the first and most basic way to gauge the impacts of the SFMP gender mainstreaming strategy. While responses varied, several themes emerged.

The majority of the members of the focus groups were women. The female participants considered any SFMP training they had ever been to as a “gender training,” since they had been invited. It was the mere inclusion that made an activity a gender training. For example, in most of the focus groups even trainings on fire safety were added to the discussions on gender trainings.

The one on one interviews, found that members of organizations that act as implementing partners spoke more about project-supported activities involved in gender mainstreaming while client organizations spoke more about gender mainstreaming in the Ghanaian culture, writ large. Though not all implementing partners tied gender mainstreaming to the activities of their organization, many were able to speak to its “strategy” facet. On the other hand, members of client organizations were less likely to speak to the strategic aspect of gender mainstreaming from a programmatic perspective. Instead they spoke about broader themes of understanding gender roles, and reducing disparities. Everyone interviewed attributed SFMP, and therefore SFMP’s gender mainstreaming strategy, to the “discovery” that women were involved in the fisheries sector in Ghana. This is very much in line with the literature of fisheries worldwide, where women generally remain invisible actors. The assessment found that the people involved in SFMP were not only made aware that women participated in the fisheries sector, but that women had the potential to be powerful change agents.

Our research shows that the people involved with SFMP were not only made aware that women participated in the fisheries sector, but that women had the potential to be powerful agents of change.

3.3.2 Beneficiaries

What is empowerment?

After asking key informants to define gender mainstreaming, the following quote was presented as SFMP’s definition, and then read aloud:

“Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN Women, 2018)

This quote helped focus the interviews, and made sure everyone involved was on the same page with gender mainstreaming and the impacts. For most of the partners interviewed, the next question dealt with defining empowerment. Not only is “women’s empowerment” one of the four main goals of SFMP’s gender strategy and results chain (see Figure 1), the term is often mentioned in SFMP publications and trainings, and it was expected to come up during the assessment (Torell et al, 2016). The assessment aimed to find out how those interviewed interpreted the term “empowerment”. It turned out that most people equated empowerment to self-actualization and independence, which come about through improved knowledge, skills, and exposure to new things. Additionally, many believed empowerment was closely linked to the power to speak for one’s self and articulation in general. These definitions were in line with SFMP’s ideas of empowerment and program activities designed to create and increase women’s empowerment (Okyere Nyako et al, 2015a).

The following sections of this paper will lay out a few key ways in which SFMP’s gender mainstreaming strategy has impacted its beneficiaries, as gathered through both key informant interviews and focus groups. In Table 3 you will find quotes from beneficiaries

that relate to these effects. In the table, impacts are broken up into different aspects of empowerment as defined by the key informants; knowledge, confidence, leadership and advocacy. While confidence, leadership, knowledge, and advocacy are intertwined facets of the broader idea of empowerment, it is important to note the effects SFMP has had on each of these traits separately.

Table 3. SFMP Gender Mainstreaming Impacts on Beneficiaries - Quotes

	Female Beneficiary (Processor) ²	Implementing Partner	Client Organization
Knowledge	“From 2014 till now, it has been observed that catches usually consist of juveniles. The project has created awareness that the practice of landing juveniles was detrimental to the fisheries of the Ghana.”	“Women now have increased opportunity to understand fisheries management and decisions.”	“Women are losing, a lot. So now they understand when [ministry] says hey “we need closed season to get stock back,” women say yes. Women agree.”
Confidence	“We understand that we have the potential to halt IUU fisheries by rejecting bad fish”	“[Before] when men and woman are together, women don’t talk until they go in their small corner and talk amongst themselves. Through this empowerment we are talking about, they are able to talk during discussions, share their opinions, express themselves.”	“The women have become confident and knowledgeable, and so they are putting pressure on me, and question authority. This is a very big impact, especially when you consider their background. These women now have huge followers, and are very influential.”
Leadership	“[When discussing changes experienced as a result of SFMP trainings] women are more active in discussions on issues related to fisheries management”	“Before, when you sent a woman to a big hotel to talk to ministers, they would not talk. Now, even if they don’t speak English, women are empowered to speak and be translated and be leaders. They express themselves at levels we/they never thought”	“Our women go to meetings with the Fisheries Commission and the minister. They talk about “say no to bad fish,” they were putting pressure... the people we train talk to others. It’s a chain..”
Advocacy	“Through the project, some women have met personally with the minister of fisheries and aquaculture development for discussions on fisheries management related issues.”	“They (the women) are now bold. They don’t feel shy, instead they talk, are interactive, bring out ideas. They used to just listen, didn’t want to answer questions. Now they are even letting other people know ‘don’t do this’ [IUU]. They are truly empowered.”	“Women are now creating awareness. They are blowing the whistle. People listen.”

Knowledge

The fishers and fish processors were asked what kinds of trainings they had participated in and what they learned from SFMP. While the male members of the focus groups had not received as many of the trainings, Table 4 demonstrates the new information female beneficiaries recalled they had learned during focus group discussions. The table shows that the responses were fairly homogenous across the different communities, especially in relation to fish handling and economics (financial literacy).

Not everyone interviewed were actively implementing these skills or knowledge, although most people agreed that they perceived changes in women's ability to discuss fisheries management, handle fish more hygienically, and be more prudent with money. Fishers and fish processors also stated that they more fully understood why a closed season was important, but many expressed that they were not ready for it.

Many women brought up how some fish processors had participated in study tours to Philippines and Senegal. Not only was this an amazing experience for the women who participated in the trips, but female interviewees had heard of their travels and seemed proud that their sister processors had been chosen for the experience. It was also encouraging to hear people, in different communities, say that they understood the need to see at least 30% of participation in fisheries management be women. These are all examples of the many pieces of information presented by SFMP that when brought together in the minds of the female beneficiaries told a story of their own significance as women, as processors, as consequential members of the fishing sector, and society at large.

² Focus groups were held in the local dialect with one member of the Hen Mpoano office, while another member transcribed the discussions into English on their laptop. These quotes were translated in the moment into English.

Table 4 Information learned through SFMP as recalled by female focus group participants

Knowledge				
Community	Leadership	Economics	Fish Handling	Equality
Axim	Conflict management Innovation Leadership Styles Advocacy Team Building	Adult Literacy Record Keeping Financial Management	Fish Hygiene Fire Safety Improved processing IUU	Gender equality Gender Issues
Ankobra	Conflict Management Innovation Team Building Communication	Adult Literacy Record Keeping Financial Management	Fish Hygiene Fire Safety IUU/Fisheries management	Gender equality Gender Issues
Shama	Conflict management Communication	Adult Literacy Record Keeping Financial Management Marketing	Fish Hygiene Fire Safety IUU/Fisheries Management	Gender Equality Gender Issues
Elmina	CLaT ³	Financial Management Record Keeping	Fish Hygiene Fire Safety IUU/Fisheries Management Improved Processing	_____
Moree	Conflict Management Advocacy Communication CLaT	Record Keeping Financial Management Marketing	Fish Hygiene Fire and Safety IUU/Fisheries Management Improved Processing	_____
Densu Delta	Conflict Management Communication CLaT	Adult Literacy Financial Management Marketing	Fish Hygiene IUU/Fisheries Management Improved Processing Fisheries Science	Gender Issues

³ Child Labor and Trafficking

Confidence

While it was never explicitly stated as part of an interviewee's definition of empowerment, or as a main effect of the SFMP project, confidence building seems to be one of the largest impacts SFMP has had on its female beneficiaries. For example, during a focus group meeting in Axim, the participants said that they now understand that the views of women are important in fisheries management. Men now recognize women in fisheries meetings, and many feel that women have been marginalized in fisheries for too long. In Elmina, focus group participants said that women are now more active in discussion issues related to fisheries management.

Confidence building seems to have been one of the largest impacts SFMP has had on its female beneficiaries.

In a recent and as of yet unpublished study of members of Ghanaian fish processing associations (Beran 2017), 87% of those surveyed stated that they were comfortable speaking at fish processors association meetings (primarily attended by other processors), and 81% stated that they feel as though they have influence over other people's fishing behaviors. The main reason people were not comfortable speaking at meetings was reported as shyness. This goes to show the importance of confidence in general, and the degree to which the beneficiaries of SFMP's partner organizations now feel they have the confidence to be heard. While there is no baseline information for this data, multiple accounts from members of the government, partner organizations, and the fishers and fish processors indicate that SFMP's activities have been the catalyst for the change in confidence.

Additionally, due to the perceptions and the resulting confidence, partner organizations and the women interviewed explained that they feel more capable of speaking at meetings where men are present. After SFMP trainings on concepts such as communication, women can stand before a man and express themselves, and can even go to an impromptu radio event or a meeting with the minister and communicate their thoughts. For example, one woman explained that she had the confidence to speak to a group of dignitaries in her local language, and with the aid of a translator was heard and understood by all. These kinds of anecdotes were numerous and repeated by women all along the coast.

Leadership

Focus group participants recalled trainings on leadership, and were quick to recite things they learned about negotiations and compromise, how to support innovation, managing conflicts peacefully, and teamwork techniques. They also stated that they learned how to take all of this information and communicate their messages accurately to the public and the government. The assessment team had the opportunity to see this leadership in action multiple times. For example, when discussions surrounding closed season got heated, members of the focus group often took it upon themselves to lead their fellow participants to a more peaceful communication technique. Additionally, when short a translator in the Densu Delta, one of the young members of the co-management committee took it upon herself to translate for the afternoon. Where women were once too shy to speak at meetings with men present, they are able to speak publicly and feel able to take on impromptu leadership roles.

Fishers and Processors better understand what makes a good leader. When asked "what can be done" in relation to improved fisheries management, focus group participants in Elmina called for more transparency in the Fisheries Commission, and for important meetings to be held on Tuesdays, when fishers and processors don't work, so they could be present during important decisions. They also said that people appointed to positions in government agencies should have the right technical knowledge. Their new skills in teamwork, conflict

management, and public speaking meant they are more likely to expect these same skills from their leaders and the Ghanaian government.

Advocacy

Most focus group members agreed that the women's advocacy for "good fish" has improved. With all of the knowledge about sustainable fisheries, leadership, and public speaking, SFMP's beneficiaries maintained that they have been taught how to communicate their messages accurately to peers and to government agencies. The women interviewed stated that they know how and why to 'say no to bad fish⁴,' and some have even become true advocates. Participants reported that these skills have been important since the fight against IUU has been met with opposition sometimes resulting in heated verbal exchanges between activists and fishermen involved in the IUU practices.

The processors state that they know how and why to "say no to bad fish," and some have even become true advocates.

Partner organizations agreed that in many instances, women have simply refused to buy 'bad fish.' One high-ranking interview participant stated that this was a big trend. This person stated that in instances where men continue to blame each other for bad fish, women "*simply don't allow the fish. That has come from [SFMP based] trainings, not our traditional women [Konkohemas], because they lack training.*" SFMP gender mainstreaming trainings have not only "discovered" and engaged women in the fisheries sector, they have broadened the number of stakeholders asking for better fish by giving women the tools to advocate for themselves.

This activism has been met in some instances with negative side-effects. Fish processors made it clear that this is a very formidable task, since their stances go directly against those of their fisher husbands. Additionally, there are times when deciding to "say no to bad fish" means fishers won't allow processors to buy *any* fish. This can have a detrimental effect on households and societal relationships and will be discussed later in this paper

3.3.3 Organizations

The following section will discuss the impacts the SFMP Gender Mainstreaming Strategy has had on its implementing partners and client organizations. These organizations include DAA, CEWIFIA, SNV, SSG, NAFPTA, DOPA, GNCFC, Hen Mpoano, FON, Daasgift, the Fisheries Commission, and UCC. In Table 5 you will find quotes from the employees of partner organizations that relate to these effects. In the table, impacts are broken up into 3 different aspects of organizational improvement; technical knowledge, logistics, and leadership.

While SFMP's Intermediate Result 5 is Gender and its Intermediate Result 7 is Organizational Capacity Development, these results are both cross-cutting themes of the project at large. Though it was "*never a part of the gender strategy*" SFMP's organizational capacity program "*happened to focus on women's organizations,*" (implementing partners) such as CEWIFIA and DAA, as stated by a member of the SFMP Rhode Island Office. In this instance, the gendered lens grew outside the "gender IR" to encompass the organizational capacity development IR. The literature would call this inadvertent equitable development of IR 7 "fully integrated mainstreaming."

In addition to prioritizing women focused implementing partners through IR 7, SFMP's IR 5 strengthened fish processing associations. Strengthening associations, such as DOPA and

⁴ "Bad fish" is a slogan used by the Ghanaian fisheries sector, describing fish that should not be caught (juveniles or otherwise illegal fish) or fish that is caught in an illicit manner (with explosives, chemicals, etc.)

NAFPTA, is one of the key links on the gender results chain (see Figure 1) and plays a vital role in SFMP's ability to increase women's empowerment. The success and the sustainability of SFMP's contribution to sustainable fisheries management in Ghana depends on this systemic approach (Kent, 2015).

Gender mainstreaming trainings is a corner stone of SFMP's gender strengthening of partner organizations. These trainings, which were held with both implementing partners and client organizations, have had an impact on office culture and attitudes towards female beneficiaries. In the most basic representation of this, a member of a client organization brought up how their institution now realizes that women researchers aren't the problem, the problem is that research vessels don't have bathrooms for women.

Table 5. SFMP Gender Mainstreaming Impacts on Partner Organizations - Quotes

	Implementing Partner	Client Organization
Technical Knowledge	"...main activity is to come up with fisheries management plan that isn't created from top to bottom, but is instead community based. To do that they (the women I work with) need to understand resources, and what a management plan is. It's been successful because we had trainings."	"There's not as much fish as before because of illegal practices – We've learned the need for a closed season in August because of researchers. When eggs are with the fish. Some years back we didn't know this. But now we know how to get our stock back. The August closing season will increase fish stocks."
Logistics	"President, funding, secretary in place - leads to sustainability. By the time the project ends we will have achieved that."	"[SFMP trained organizations to] identify yourself at all levels - national, regional, local. Now we can go to a place and just call a person. Now we know each other."
Leadership	"On the closed season committee, women's associations and women were represented. This is very laudable. Even in a normal commission, they never had a woman."	"Formerly women have no voice. Now every policy meeting, they invite me. In every fishing decision, a women organization is there. They are involved in meetings."

Technical knowledge

Another simple way SFMP's gender mainstreaming strategy has benefitted its female based partner organizations is through trainings that increase their employees' technical knowledge. By bringing to light female involvement in the fisheries sector, SFMP has been able to focus some of its energy on women's associations. The assessment showed that women's contributions to the Ghanaian fisheries sector had been previously overlooked. Where past programs have aimed to improve fishers and fisheries management, SFMP's gender mainstreaming strategy has been the first to ensure resources are reserved for organizations that work with processors and formerly unnoticed female boat owners and fishing expedition sponsors (CRC 2014). Because of this foresight, women's organizations were given the skills needed to not only organize, identify, and mobilize themselves, but to understand why this is necessary.

Logistics

Beyond gender mainstreaming and technical trainings, part of SFMP's strategy for organizational capacity development was to implement an Organizational Capacity Assessment (OCA) for many of its partner organizations (both implementing partners and client organizations). During one on one interviews with members of these organizations, the women interviewed maintained that they were honored and appreciative of "the OCA." They were listed where the OCA assessment found strengths and weaknesses in their organizations, while also speaking to the importance of their newly formed standard operating procedures. Everyone interviewed who had participated in the evaluation stated that the OCA helped teach the power of elections for leadership positions. CA participants also stated that the assessment helped them realize the value of taking time to strategize for each year, and the importance of creating a management plan for each new project.

As stated by a member of an implementing partner organization "All we have learned has been laudable. The knowledge SFMP has imparted managerially has been enough to have a great impact on our work. We are very grateful." In addition to managerial skills, all the organizations assessed, not just those who had been involved in an OCA, reported being much more savvy to financial management as a result of SFMP trainings. As an example of this, a member of a client organizations stated that SFMP (and the gender mainstreaming strategy) introduced "streamlined procedures that helped us with audits... all our books are now in place." This quote is representative of statements from most all of the organizations interviewed. As another form of sustainability, the interviewees stated that SFMP has made them think about future sources of funding. While not all of the organizations had secured future funding, they stated that SFMP has made them realize this necessity.

In addition to institutionalizing certain managerial techniques, SFMP's trainings brought attention to the importance of rectifying gender imbalance in the SFMP partners' hiring practices. This was especially true for the partners that did not work exclusively with fish processors. Meaning, the organizations that were more likely to have excluded women to begin with took the message of female inclusion to heart. Beyond just listening to and believing in this non-traditional and unconventional message, each of these organizations stated that they have already implemented new "affirmative action-esque" hiring practices.

Leadership

Beyond technical and logistic development, one big part of the recent successes of women's organizations has been their ability to identify, coordinate, and mobilize themselves. As stated by someone who had worked with previous fisher's aid projects *"In times past we've had projects that supported fishermen, these men are still unable to organize themselves to advocate for good fish. Now [after SFMP trainings] the women do their own on the ground organizing, mobilizing."* Thanks to this new ability to manage themselves, the leaders in these organizations are able to network and feel confident in their abilities to give their constituents beneficial skills, tools, and knowledge. Where there was once no female voice in Ghanaian fisheries management, now women's organizations leaders are invited participate in events, such as FAO consultative workshops abroad and fisheries decision making meetings at home.

Generally, members of SFMP partner organizations were happy with SFMP's capacity development efforts and stated that they would not change the way the gender mainstreaming strategy had been implemented. The only thing they asked for was more time for the project, and thus more opportunities to learn from CRC and SFMP. Traditional leaders stated that they hoped that one day SFMP could build the capacity of Konkohemas in the way the program has built capacity in the more modern organizations.

3.4 Densu Oyster Pickers Association

3.4.1 History

The Densu Delta estuary is a microcosm of the degradation of Ghana's marine environment as a whole and it is arguable that SFMP's strategy of strengthening the Densu Oyster Pickers Association (DOPA) is a microcosm of the project as a whole. Located southwest of Accra, the growing human populations living in the Densu estuary have contributed to environmental degradation and dwindling fish and shellfish populations. Oysters are an overfished source of protein, the mangroves are overexploited, and the marine habitat is effected by global and local point and non-point sources of pollution.

Like many artisanal shellfisheries in the global south, oyster harvesting in the Densu Delta is a vocation traditionally held by women. The labor of women oyster pickers in this region has been invisible, underestimated, or not enumerated at all (Bennett, 2004; Ogden, 2017). Perhaps as a result of this global omission, working with the shellfish harvesters of the Densu Delta was not initially on SFMP's agenda.

Since the beginning of SFMP, mangroves were ecosystems targeted for integrated (subnational) management plans (CRC, 2015). However, the initial efforts focused on spatial planning to ensure sustainable wood supply chains, fish nurseries, and sound local policies, as opposed to the current focus on oysters, habitat co-management, and primarily female harvesters.

SFMP's work with the Densu Delta oyster pickers (DOPA) has been very successful. After merely one year of support from SFMP, members of DOPA agreed to close their oyster grounds to harvesting for five months in order to allow for a rebound in oyster populations. This decision was made without the support of the project or its partners. It is very positive that the community created its own closed season for oysters. One reason why the significant and swift progress is that the Densu estuary stakeholders is a relatively small and cohesive group – especially when compared with the Ghanaian fisheries sector at large. This makes critical mass and consensus easier to reach. However, regardless of the number of stakeholders, the fundamentals of SFMP's strategy for working with DOPA have merit and are worth noting as an example of successful development/aid planning.

3.4.2 Success

The gender assessment team explored why DOPA was able to successfully, promptly, and harmoniously implement a closed season. One reason was that following SFMP's gender mainstreaming strategy, the women of DOPA were empowered through increased scientific knowledge, confidence, leadership, and abilities to advocate. Much of this empowerment can be traced back to certain astute decisions made about extension work with the Densu communities.

First, after listening to the needs of the communities, there was very limited observable "foreign" involvement with DOPA. This definitely had an impact on the women's confidence, perceived leadership, and advocacy abilities. As stated by a member of the team working with DOPA:

"There was this misconception 'ooooh, foreigners are coming to take our land.' So they told us, 'let us do this ourselves.' Eventually they realized that the [foreigners] wanted to help them. Though I think DOPA's success came from everything being very participatory, because they didn't see the foreigners much. It also calmed their nerves."

Second, extension agents working with the community integrated themselves whenever they could. When asked whether or not they were seen as outsiders, one extension agent who had worked very closely with DOPA stated:

"No. In community extension work how you dress and how you speak are all very important. You have to go down and eat with [community members]. You are their class. I feel now that I am a part of them and they accept me. I am their friend. Some of the ladies call me to check up on me."

After interviewing different extension agents working with SFMP, those working with DOPA were the only ones to speak to the importance of integration. They were also the only ones to speak to the importance of incorporating adult literacy workshop strategies into their trainings. This is why the curriculum for oyster ecology and biology was created specifically for the DOPA community. Time was taken before teaching began to meet with the women, and ask them questions. This meant that the information was taught at the women's level at the same time as it was presented in a way that made it interesting. As stated by a DOPA extension agent:

"One thing I have realized with adult education is that you have to create interest. You have to do whatever you can do. I never saw a woman sleeping in class... You cannot have them sit for over 30 minutes, you need to know this is not a university class. You have to solicit ideas. Ask what the women think, what they know. Then you can straighten the path of what's incorrect. You just try to correct the indigenous knowledge that is already there. Role play worked, teamwork, lots of ice-breakers."

Another important aspect of DOPA's success can be found in the curriculum. Beyond its utilization of successful adult literacy techniques, the curriculum's emphasis on hands-on science worked well for the Densu estuary, oyster pickers association, and especially the group of women data collectors. After the focus group interview with the members of DOPA, the research team had the opportunity to board a canoe with the DOPA data collectors. Out



Figure 3. “We Are Scientists”- DOPA Data Collectors with research team

on the canoe, the mostly illiterate women worked together to record data on the Delta's salinity, temperature, turbidity, and pH. “*We are scientists*” the ladies gleefully proclaimed after recording their last number. Not just fully understanding the science, but owning the data, or at least playing a part in its collection, seems to have had a profound effect on the data collectors, members of the Densu Community, and the mangroves themselves.

and traditional leaders. By engaging youth and other non-leaders, who are often overlooked, the Densu Oyster Picker's Association was able to reach critical mass of support for fisheries management. As a result, the majority of the shellfishery's stakeholders are not only asking for, but passionately demanding, a better managed fishery.

3.4.3 Moving Forward

While the closed season has contributed to increasing oyster populations and the well-being of the harvesters, there is always room for improvement. The two main causes of concern identified in during the assessment involve men and time. Time is a simple constraint to explain, though tricky to address. During focus group interviews, the oyster pickers explained that they are concerned about the approaching end date of SFMP and hence, the end to SFMP's financial support to their data collection. One challenge is that once the data collection ends, the most visible part of the management efforts will no longer be there. There is a risk that the leadership roles of the mostly young women data collectors would dissipate.

Another area for concern is about benefit capture. Though DOPA support did include a few men, it focused on strengthening the livelihoods of the young and female oyster pickers, who are among the poorest in their community. The project support included not only fisheries management, but strengthening post-harvest processing, access to microfinance, and business management. There are examples from other parts of the world (e.g. Nicaragua) that indicate that when the profitability of oyster harvesting increases, there is a risk that more affluent community members (often men) will enter into oyster harvesting. This will increase the pressure on the oyster resources – and it could push the previous harvesters of the fishery. Plans to mitigate this can be found in the Densu Management Plan, which calls for exclusive rights be granted to the association, as referenced in Appendix B (Fisheries Commission, 2018).

SFMP's work with DOPA engaged a broad array of oyster pickers, including regular women, youth,

4.0 DISCUSSION

The assessment presented in this report was conducted to gauge the impacts of SFMP's gender mainstreaming strategy and understand if/how implementing the strategy has led to any changes within the Ghanaian fisheries sector. The results show that SFMP's activities have brought about positive changes in the way its beneficiaries perceive women's role in fisheries, how SFMP's female beneficiaries feel about themselves and their role in the sector (empowered), how partner organizations relate to women in fisheries, and how partner organizations (especially female-led fish processors organizations) operate. In relation to SFMP's main goal of ending overfishing and stopping the collapse of the small pelagic stocks, these results suggest that SFMP has expanded the base of stakeholders advocating for better managed fish. This may have contributed to recent progress in fisheries management, but as will be shown in the discussion below, there is room for further improvement.

4.1 Beneficiaries

SFMP's theory of change (TOC) maintains that engaging women in the fisheries sector is an important aspect of building powerful constituencies that demand a well-managed fisheries sector. The TOC shows that in order to expand women's engagement, they have to know their roles, which in turn brings attention to the large, but largely invisible role women play in the Ghanaian fisheries. In the next step of the TOC, men and women need to understand that as key members of the sector, women are also key decision makers. To bring about this change, SFMP implemented activities that gave women the tools they need to become leaders advocating for fishery management reforms. Concurrent to strengthening women's capacity, SFMP's TOC shows that strengthening the female fish processors economic well-being is equally important to meeting the ecological goals of more sustainable fisheries.

Hundreds of thousands of people are involved in the Ghanaian fisheries value chain; from the fishers to the processors to the consumers. SFMP's gender mainstreaming strategy has worked to include the processors in its activities and in the sector's decision making processes. However, while SFMP has succeeded in engaging many women processors, the project is only at the beginning of the diffusion of innovation process as expressed by Rogers (1995).

The beneficiaries of SFMP's activities have been empowered to some extent. However, the percentage of people within the fisheries sector that have adopted the idea of working towards small pelagic fishery recovery, and therefore changed their fishing and advocacy behaviors have not reached a critical mass. Most of the focus group discussions stressed the need to reach out to people beyond the those already reached by SFMP activities. For example, one fish processor stated "*Fishermen now decline to sell fresh wholesome fish to women who initially rejected bad fish previously landed.*" There are multiple reasons why the stakeholder engagement has been limited, some of which will be discussed below.

The percentage of the population that has adopted the idea of working towards small pelagic fishery recovery, and therefore changed their fishing and advocacy behaviors, has not reached a critical mass.

4.1.1 Non Leaders in partner organizations

The networks of SFMP partner organizations are remarkable and the assessment found that capacity development workshops have helped them grow and organize. However, discussions and interviews with beneficiaries of the SFMP show, as stated by a fish processor "*Trainings should be organized for larger number of participants.*"

It appears that although the networks are large, only some of the members get invited to SFMP workshops. Discussions with fishers, processors, and members of partner organizations found that it is usually the most distinguished members that are invited to trainings first, and only if there is room, others will be invited. This may stem from the incredibly important value and respect placed on elders and dignitaries in West Africa. Programs such as SFMP should strive to put systems in place that make sure the truly committed, not just the distinguished, are invited to events. However, this can be difficult when people know the participants will receive something like food or a tee-shirt, and deference must be paid to the higher ranked community members.

In order to engage more “non-leaders” and underrepresented members of partner organizations, workshop facilitators could take a page from the gender mainstreaming strategy and a larger number of trainings. The strategy states that the project should first engage men and women separately in order to maintain relations with men while also give women the time and space to speak. Building on this strategy, perhaps SFMP should hold separate meetings for the “notables” and the rest of the community members. This is especially true for the youth. The assessment team observed that the focus groups included a disproportionate number of older community members. One implementing partner stated:

“SFMP is concentrating on adults. I wish you would try to have 50% youth and children represented at your workshops. You can’t teach an old dog new tricks. The youth however are malleable. We should work on transforming [the younger generation] into positive and productive adults, rather than waiting for youth to become irresponsible adults, and then training them. The youth can and should be involved in these networks. It is high time for new champions.”

SFMP’s 2015 gender analysis reported that, in relation to fishing, processing, and leadership roles in fishing communities “*Children are groomed to occupy the positions in the future,*” (Torell et al, 2015). While SFMP is ending in 2019, future projects should look into harnessing the energy and malleable nature of youth.

4.1.2 People outside partner organization networks

Although the networks are large, they do not represent the entire population of fishers and fish processors. As stated previously, in order to reach a critical mass of people advocating for sustainable fisheries management and behavior change, it is important to broaden stakeholder engagement. Additionally, literature about women’s networks and environmental governance shows that in order to successfully change a dominant norm, women’s associations must continuously work towards “attracting new recruits” (Bretherton, 2003).

A study by Beran (2018) shows that while most fish processors in Ghana are members of an association, 33% of those surveyed were not members of a fisheries related group. Non-members stated that they did not participate as a result of lack of interest, time constraints (the result of household and reproductive responsibilities), poor health, distrust and disillusion with respect to high membership dues, and no access to loans. Even among members, less than 70% state that they actively participate in meetings and other activities. Hence, it is critical to address the needs of non-members and attract non-members to participate in group activities.

Research on gender and natural resource management states that using women who are already engaged to create and strengthen *new* connections is an important role of women’s networks. Movements can do this by opposing existing social orders and formal/hierarchical forms of organization. Bretherton suggests that rather than being bound by their roles as efficient tools of a rigid and formal existing political/patriarchal structure, women’s networks

are most effective when they display an emphasis of reciprocal relationships, shared values, and an exchange of information and services. While the organizational values are not necessarily in tune with the current customs of Ghanaian associations, research shows that organizations can be effective if women's networks frame their issues in ways that will be widely received and perceived as relevant to the majority, not just the in-group.

The need to attract all people, not just those in associations or those who are more likely to have the funds that allow them to adopt a new risky behavior, was established in the SFMP Gender Needs Assessment. The assessment stated *"Women with little or no assets in the sector should be included in the associations where they can be heard. As a unified body, the women can serve as allies in fighting illegal fishing."* It appears that SFMP has depended on pre-established networks for "on the ground" activities and it has been less successful in reaching a broader base.

There are no silver bullets for increasing engagement. During one of the focus groups, participants had a tense discussion with the staff of a partner organization about the proportion of fishers and processors reached by SFMP. The focus group participants, who could be regarded as innovators, discussed the discomforts of being rather isolated activists and brainstormed how to engage more community members. In addition, during a key informant interview, a young member of the Fisheries Commission told a story of going to the beach just to chat with fishers and processors as they mended nets and waited for the day's catch. The young volunteer said that he didn't have a goal with this interaction, other than getting a feeling of what was happening on the ground. When discussing how to reach out to people who have yet to be taught about sustainable fisheries management or women's empowerment, he stated:

"Getting to those people is a little difficult. All they know is their business. Sure you can build our [the Fishery Commission's] capacity, but there are so many people out there who haven't been reached. Though they look like they're just sitting there waiting for a boat to land and get fish, they don't really even have the time to talk, let alone go to a meeting. Their minds are so anxious about the boat that will land later that day, how much fish it will have. While we've done well targeting leadership, we need to figure out how to engage those straight from the grassroots."

One SFMP key informant stated that the true path to reaching critical mass, and therefore sustainability, is to figure out who will have the resources and the staff to continue implementation after the project ends. An implementing partner said that if someone could give resources to and train the fisheries commission to act as true extension agents like those in "agriculture" they could one day become this kind of resource. Similarly, a member of the Fisheries Commission stated:

"That [grassroots engagement] is our role. We don't go to leadership; we go straight to the ground. We need to join them, pull the nets, sort the fish, repair the net. Work with them and talk with them. This is something we should invest more in. Also, the fact that its men in uniform carries a lot of impact."

4.1.3 Men

One theme that came up during the assessment was putting the blame of overfishing on women. This was a pattern voiced during focus groups and with client organizations. While these comments may have been expressed "tongue in cheek" and as a way to provoke the dialogue, it indicates that the gender mainstreaming efforts have made men think about women's role in fisheries:

“Ladies are involved more than the guys. What the guys do is fishing and managing the boat. From there its all the ladies. Selling, marketing, processing. Now, women are even involved in managing canoes. There’s a lady managing 16 canoes...It’s up to the women to buy less fish.”

As another example, during a focus group meeting one of the participants stated:

“The illegal practices have not been completely halted because women have not been actively involved in its prevention and reporting.”

These quotes illustrate that – even if expressed mostly to provoke – some fishermen, the true extractors of fish, may put the blame of the small pelagic stock crisis on women. By no longer remaining invisible, and instead stepping into a spotlight of advocacy, women have become targets. As a result of this they now bear the burden of advocacy, and in some minds, women also bear the burden of blame.

The assessment found that where women are seemingly disproportionately burdened with advocating for better fisheries management, they are also disproportionately burdened with managing household economics. Focus group participants stated that women were the target for SFMP’s livelihood and business acumen because it is up to the women to provide for the family. One employee of a client organization stated:

“In Ghana, men don’t give chop-money⁵ to women. Everything depends on women. School fees, food, providing children with high education.”

Additionally, the 2015 Gender needs assessment from SFMP year 1 stated:

“One reason why fishermen give their catches to their wives (or mother, if they are not married) is that fishermen do not give “chop money” (housekeeping money) to their wives. They believe that women should use the profit from fish sales as housekeeping money. In general, husbands and wives have split economies, and few fishermen pay for household needs and school fees.”

A member of a partner organization said:

“Women always think about kids and their future. That is their compassion. When their children are dropping out of UCC because of a decrease in fish and there is decrease in money of fisher folks, that really hits women hard...Men say ‘I have hustled, my children must hustle.’ Women just want an easier life for their children.”

If men do not increase their role in ensuring that their households are healthy and financially secure, while women are taking on the additional burdens in fisheries management and improving the post harvesting process, the responsibilities will be unbalanced.

When promoting the importance of women in fisheries management and encouraging their advocacy of sustainable fishing, it is important to not give men an “out,” where they no longer face the burden and negative side effects of advocacy. Nor should men be given an “out” in terms of caring for the health and security of their households. Men are just as capable of empathy (i.e. caring about their families and environmental degradation). However, as the literature on gender and environmental management shows, women are the easier targets.

⁵Chop Money – In West Africa, this refers to money used for the daily provision of food

4.1.4 Participation in meetings and workshops

Involving women in environmental management is not just about making sure that a specific number of women are involved in a project, although ensuring that women are represented in meetings and workshops can be an important first step. Figure 4 visually represents the data gleaned from SFMP's training database. It should be noted that the dataset may be missing certain events, is only representative of the first three years of the project, and is not as comprehensive a look at SFMP gender based activities as the information in Table 2. However, it is worth taking a look at. Figure 4 shows the cumulative number of men (blue) and women (pink) that attended 244 events held by SFMP in the first three years (CRC, 2018a). A total of 9,942 people participated in the events, 6,177, or 62% of whom were women.

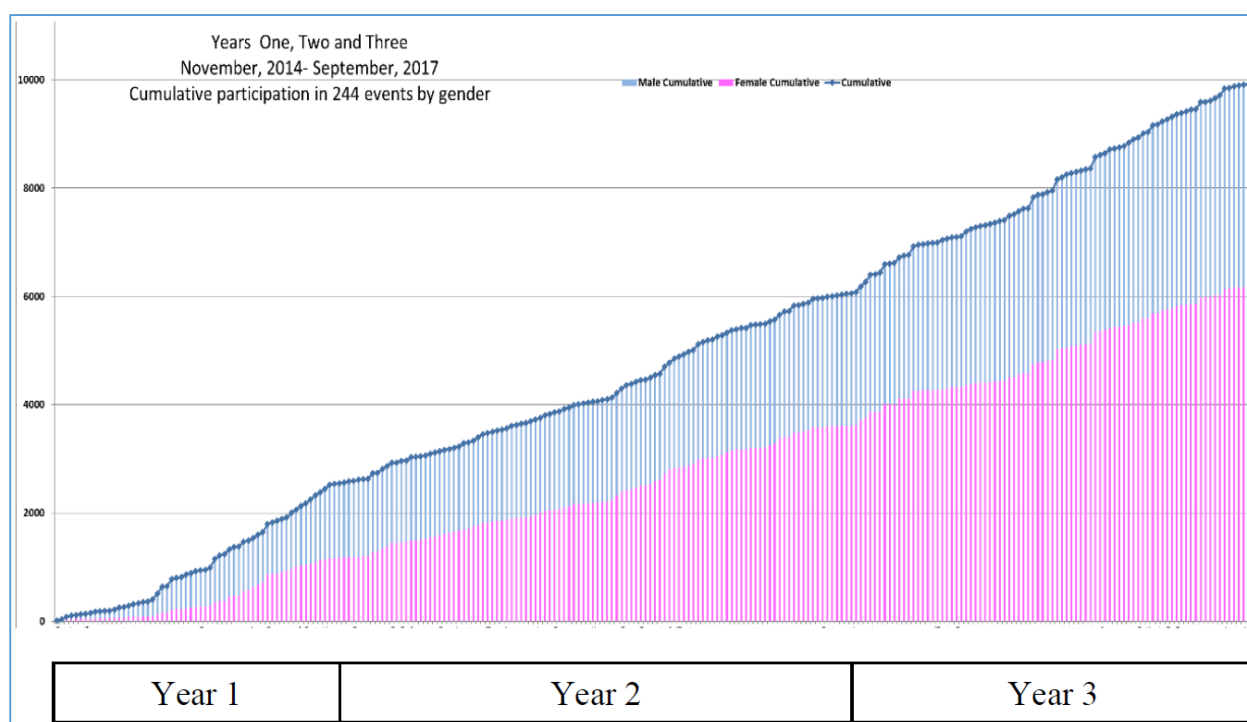


Figure 4. Cumulative number of SFMP Participants in 244 events (CRC, 2018a).

Table 6 shows the number of men and women at different types of SFMP events, for the same three years as represented in Figure 4. It demonstrates that in the first three years of the project, women made up 62% of the participants of all SFMP events. Looking specifically at livelihood related events, women made up 78% of the participants. This explains why the focus group participants maintained that SFMP focused on teaching financial responsibilities to women rather than men. Removing livelihood events, the percentage of women involved in SFMP events drops to 35%. For science and policy related events, the percentage of women involved drops further to 33%. While percentages of women participating in Program Management, Policy, and Science may seem low, one must note this might be due to the fact that there may be fewer women involved in policy and science to begin with. Additionally, these numbers might represent a major increase in women involved in science and policy from years prior.

Table 6. Men and Women's participation in SFMP Events years 1-3 (CRC, 2018a)

Event Type	Number of events	Men	Women	Total
Cumulative Total	244	3765 (38%)	6177 (62%)	9942
Livelihoods	131	1352 (22%)	4849 (78%)	6201
Cumulative minus Livelihoods	113	2413 (65%)	1328 (35%)	3741
Policy, Science, and Partnerships	104	(77%)	(33%)	3255
Program Management		304 (50%)	305 (50%)	609

A more fully integrated strategy might involve incorporating men in livelihoods events and more women in science and policy events. However, these numbers reiterate that looking at the total average of women's participation gives an incomplete picture. Regardless of strategy, comprehensive development policies must move beyond "ticking boxes and numbers to changing attitudes and contexts," (Bennett, 2005). Livelihood activities in SFMP were focused on women, and so of course the data would show a larger number of women receiving financial education. However, projects like SFMP must be mindful of development activities and their implications in relationships between men and women. Again, many people stated they believed women were being targeted for these interventions because it is the responsibility of the woman to either manage the fisheries or provide for the family, not because they are the more disadvantaged gender.

To rectify this imbalance, it would be prudent for future projects to create a better balance among women and men in meetings and workshops. This would mean increasing women's involvement in fisheries management and science – and men's involvement in activities that relate to strengthening household incomes. However, to avoid men outcompeting women processors if fish processing becomes more profitable, engaging men in those livelihood activities should come from an "ally building" or "Men as Partners" (MAP) perspective. Developed within the field of reproductive health in 1996, the original goal of MAP was to engage men with information and resources, to decrease women's burden, and promote the constructive roles men can play in reproductive health. Most importantly, MAP worked to actively promote gender equity by "*engaging with men to challenge the attitudes and behaviors that compromise their own health and safety of that of women and children*" (Mehta et al, 2004). While most of the MAP literature relates to public health, the ally building perspective could easily play out in a fisheries sector.

Instead of placing additional burden on women, who might not yet have the capacity for true transformation, development projects need to keep in mind the idea of decreasing the burden of women concurrent to strengthening their role in fisheries management. This twist on old ideas of gender mainstreaming could be very successful for future projects. As stated by a young employee of one of our client organizations:

"I believe that most fish actually being controlled by men. Sure, women are influencing men, but men, they still control. We need both genders, everyone to come together and make a concrete decision. Ok, the women own boats...but the men still control. The impact so far, we deal with women so the impacts have been on women. But, men have been coming forward, they try to come into what we're doing. These men want to go because it's good."

4.1.5 Traditional Leaders

SFMP focused on working with the relatively recent fish processing associations. However, each fishing community in Ghana has a venerable tradition of maintaining a chief fisherman, and a chief fishmonger/processor, or *Konkohema*. Where the chief fisher holds authority over most of the local fisheries sector, the *Konkohema* is called upon to help find solutions to problems related to travelling, transportation of goods, selling, and debt collection (Odotei, 1999). While this female representation is notable, that assessment found that currently, most people believe the *Konkohema* represent “*a queen on the ground, but not in true leadership.*”

A study on gender in Ghanaian fisheries by Irene Odotei in 1999 stated “A common feature of the chief's council is that it is all male, the only exception being among the matrilineal Fante [*Konkohema*], where the queen mother or the occasional female sub-chief may speak on behalf of women. Women usually remain in the background and are consulted when necessary.” However, while the current status of *Konkohema* is seen as “lesser” in the chief's council, this group of women represents an influential population that has been a bit overlooked by SFMP. This limited SFMP's scope and perhaps also effectiveness. This is not a new concept. The SFMP Year 1 2015 Gender Needs Assessment stated:

“Existing women associations like the Development Action Association or the National Fish Processors and Traders Association should be engaged to extend their activities to the community level. The existing local management system revolving around the *Konkohema* should not be ignored in the process. Rather, efforts should be aimed at strengthening the weak leadership and management system already in place”

While there was no conscious shift away from this idea, and there are some SFMP activities linked to the *Konkohemas*, they received less focus than the women processing associations. As stated by a member of a client organization “*Not every Konkohema is a part of the Canoe Council, not every Konkohema is a member of [a women's organization].*” While many changes in the fisheries sector have been observed, key informant interviewees maintained that the *Konkohemas* have not been fully engaged: “*not our traditional women [the Konkohemas], because they lack training.*” While past research demonstrates that these queens tend to remain silent in a fisher chief's council, the results of this assessment shows that a more focused set of SFMP activities designed to empower the *Konkohemas* and their network might have a profound impact on their abilities to lead, manage, and mobilize members of their communities (Odotei, 1999). In a perfect world this would also allow the queens more than just a seat at the fisher chief's council. The 2015 Gender Needs Assessment foresaw this link in the chain, stating:

“The fishermen and the National Canoe Fishermen Council should be sensitized on the importance of having women involved in the management of fisheries. They can have women representatives like the *Konkohema* serving on their management team to push for the consideration of the needs of not only the men, but also the women and children in any decision taken.”

The fishers and processors that participated in focus groups suggested that after some activities designed by SFMP, “*The Konkohemas authority should be backed by law to ensure compliance of women to IUU regulations.*”

4.2 Impact of gender mainstreaming on SFMP supported partner organizations

Results from this assessment show that SFMP's gender mainstreaming strategy has most positively affected SFMP partner organizations' technical knowledge, logistics, and leadership. The assessment also found that the project fully mainstreamed gender into its organizational capacity development support. However, as previously stated, SFMP has not

yet reached a critical mass of stakeholders asking for better managed fish, nor has it been able to fully mainstream gender at local level. Below are a number of recommendations for how future projects could better mainstream gender when strengthening local organizations and government partners.

A big win for SFMP was the adoption of a National Gender Mainstreaming Strategy for the Fisheries Sector (MoFAD, 2016, Okyere Nyako, 2015). Implementing the national strategy as well as the SFMP gender mainstreaming strategy involved implementing gender mainstreaming trainings with a broad range of organizations. The assessment indicates that these trainings resulted in a systemization of equity driven hiring techniques, more favorable ways of dealing with female beneficiaries and employees, and an increase in the capacity of female-led institutions. However, the fisheries sector has not yet reached the point where all actors and institutions involved in public policy take responsibility for gender equality as expressed by Daly (2005).

5.0 CONCLUSIONS AND RECOMMENDATIONS

SFMP's developed its gender mainstreaming strategy to increase the equity and efficiency of sustainable fisheries management. The gender mainstreaming activities are built on the premise that if both men and women demand good fisheries management practices, implementation will be timelier, more enduring, and more effectively diffused. The gender impact assessment found that the SFMP has made great strides towards these goals and comparing the achievements in relation to the timeframe (3 years), it is clear that the project has been successful in moving the needle on making the fisheries sector more gender equal.

An important accomplishment was the adoption of the Fisheries Sector's National Gender Mainstreaming Strategy. Trainings and other activities implemented in support of the strategy have contributed to more equitable hiring techniques, increased support for female beneficiaries and employees, and an increase in the capacity of female led institutions. As a result of SFMP's engagement, women are more confident, knowledgeable and empowered to speak up. The assessment found that women's confidence has grown and that men recognize that it is time to acknowledge the role that women play in the fisheries sector. Capacity development sessions related to innovation, conflict management, advocacy, and leadership have contributed to women's perception that they have a voice in fisheries management. Women have been exposed to sustainable fisheries management and are equipped with the knowledge and leadership skills to advocate for good fisheries practices. Women are able to discuss fisheries management, including the importance of closed seasons and other measures. Trainings in post-harvest processing have helped women handle fish more hygienically whereas trainings in business management and financial literacy have provided tools to enable women to grow their processing enterprises.

Summarizing the impact on local organizations, SFMP's gender strengthening efforts have had an impact on the staff's attitudes towards women and women's engagement in fisheries. Gender mainstreaming efforts have succeeded in challenging cultural norms about women's role in fisheries as well as in the work place.

The Densu Estuary case is a success story within SFMP's broader gender mainstreaming effort. Multiple factors have contributed to the success, including the fact that DOPA is a relatively small and cohesive group, which meant that it was easier to reach a critical mass and consensus. Another success factor was the participatory management and monitoring approach, which increased scientific knowledge, confidence, leadership, and the ability to advocate. Finally, DOPA worked with passionate and engaging extension staff, whose energy rubbed off on the local stakeholders.

In the Ghanaian fisheries sector, gender mainstreaming is neither fully integrated, nor entirely fragmented, but somewhere in-between. As stated in the literature review, “mainstreaming light” is a type of gender mainstreaming middle-ground that happens when there “*is a spreading out of responsibility for gender-related objectives to more line ministries. However, mainstreaming is at an early stage of development and does not span the entire policy spectrum or hierarchy*” (Daly, 2005). An example of this disconnection was found during interactions with local partner and government employees. While nobody questioned the need to assess the impacts of SFMPs gender mainstreaming strategy, those who were not “the gender specialist” within the organization would often question why they needed to be interviewed. One employee told the team that a key informant consultation with them would be a waste of time, and effectively refused to be interviewed.

This “mainstreaming light” can also be found when examining the categorization and organization of the project itself. Although gender is a cross-cutting theme, it is a separate intermediate result within SFMP and gender is to some extent regarded as a separate activity rather than something that is mainstreamed. Although gender became more mainstreamed in some activities, such as the DOPA and organizational strengthening activities, the segregation of “gender” in other IRs might be holding the project back from implementing a fully integrated gender lens. As stated by one of our implementing partners “*Every project has a gender officer but everybody else should be a gender deputy.*”

The easiest way to more fully integrate gender mainstreaming and gender equality in Ghana’s fishing sector is to make sure that organizations working in the domain keep up their “gender” trainings. The key informant interviews revealed that many new employees, or those who had missed the initial gender mainstreaming workshops, knew little about SFMP’s gendered lens, and thus felt that the “gender aspect” of the project had little relevance to their work. Even some who had been to gender trainings denied the workshop’s relevance to their role in the program. Hence, it would be good for future programs make sure that all employees are not only “gender-trained”, but that the workshops are addressing the concerns of the most skeptical. This might mean involving and hiring more youth – who during focus groups and key informant interviews were the most insightful regarding what gender mainstreaming means. Another way to more fully integrate gender mainstreaming in future projects is to make it clear that although each project and organization has a gender specialist, every single staff member is responsible for being a “gender deputy,” or at least has “gender equity” as one of the roles in their job description.

After three years of implementation, SFMP is still in the beginning of the process of diffusing gender mainstreaming into the Ghanaian fisheries sector. Most of the individuals involved in SFMP activities are aware of women’s role in the fisheries sector and they perceive that women can be change agents for sustainable fisheries management. The next step will be to move from gender “mainstreaming light” to deeper and more far reaching gender mainstreaming results. The gender assessment has provided a number of recommendations for how this can be achieved:

1. Broaden the participation of women in fisheries management by ensuring that non-leaders/elders/dignitaries are invited to and are capable of attending project activities. Put systems in place to make sure that the truly committed, not just the distinguished, are invited to events.
2. Identify and work with champions that will have the resources and the staff to continue implementation over time to reduce reliance on project-based funding.

3. Be clear that gender mainstreaming requires the involvement of both women and men. Women are involved in almost every node of the fisheries value chain and they are disproportionately burdened with managing household economics. By taking a “men as partners” approach, it may be possible to increase men’s support and reduce the additional burdens that may come about as women engage more in the fisheries sector.
4. Increase the involvement of traditional fisheries leadership structures, including the chief fishmonger/processor, or *Konkohema*. These leaders may have an untapped potential to lead, manage, and mobilize their communities.

REFERENCES

- Bennett, E. (2004). Gender, Fisheries and Development. *Marine Policy* (29): p451-459.
- Beran, K. (2018). The Role of Gender in Small-Scale Post-Harvest Fisheries Sector: Is There Room for Improvement? As yet Unpublished. The University of Rhode Island, Coastal Resource Center. 6 pp.
- Bretherton, C. (2003). "Movements, Networks, Hierarchies: A Gender Perspective on Global Environmental Governance. *Global Environmental Politics*, 3.2: pp 103-119
- Britwum, Akua Opokua. (2009) "The Gendered Dynamics of Production Relations in Ghanaian Coastal Fishing." *African Gender Institute* 1.12: 69–85. Print. *Feminist Africa* 12 Land, *Labour and Gendered Livelihoods*.
- Cinner, J., T. Daw, and T. McClanahan. 2009. Socioeconomic factors that affect artisanal fishers' readiness to exit a declining fishery. *Conservation Biology* 23:124–130.
- Coastal Resources Center. (2014). The Integrated Coastal and Fisheries Governance (ICFG) Program for the Western Region of Ghana, Final Report, 2014. September 4, 2009 to January 13, 2014. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. PW016. 78 pp.
- Coastal Resources Center (2015). The USAID/Ghana Sustainable Fisheries Management Project Year 1 Work Plan, October 22, 2014 – September 30, 2015. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_PGM004_CRC. 105 pp.
- Coastal Resources Center. (2018a). Progress Report. January 1 to March 31, 2018. USAID/Ghana Sustainable Fisheries Management Project. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_PGM196_CRC. 65 pp.
- Coastal Resources Center. (2018b). Progress Report. April 1 to June 30, 2018. USAID/Ghana Sustainable Fisheries Management Project. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_PGM197_CRC. 63 pp.
- Crawford, B., L. Gonzales, D. Amin, B. Nyari-Hardi, & Y.A. Sarpong. (2016) Report on the Baseline Survey of Small Pelagic Fishing Households along the Ghana Coast. The USAID/Ghana Sustainable Fisheries Management Project (SFMP) Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_PGM187_CRC. 122 pp
- Daly, M. (2005). Gender Mainstreaming in Theory and Practice. *Social Politics: International Studies in Gender, State, and Society*, 12 (3). P 433-450
- Fisheries Commission. (2018). DRAFT Oyster Fishery Community Based Management Plan for the Densu Delta, Ga South Municipal Assembly, Greater Accra, Ghana. 2018. Ministry of Fisheries and Aquaculture Development, Fisheries Commission. 55p.
- Food and Agriculture Organization of the United Nations. (2015). Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the context of Food Security and Poverty Eradication. Rome. *Food and Agriculture Organization of the United Nations*.
- Friends of the Nation (2015). Anti-Child Labor and Trafficking Field Survey Report. The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Coastal Resources

Center, Graduate School of Oceanography, University of Rhode Island. Narragansett, RI: GH2014_POL040_FoN. 37 pp.

Galletta, A., Cross, W. (2013). Mastering the Semi-Structured Interview: From research design to analysis and publication. New York, NY: NYU Press.

Kent, K. (2015). Organizational Capacity Assessment Report for government and Public University Units. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island and SNV Netherlands Development Organization. GH2014_CAP003_SNV. 36 pp.

Kleiber, D., Harris, L., Vincent, A. (2015). Gender and small-scale fisheries: a case for counting women and beyond. *Fish and Fisheries*. 16: p 547-562.

Lazar N., Asare C., Nortey D. D. N., Kankam S., & Agbogah K. (2015). The Small Pelagic Fisheries Profile: Analysis of Regional Results. USAID/Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island and Hen Mpoano. GH2014_ACT001_CRC. 39 pp.

Leach, M. (2007). Earth Mpothor Myths and Other Ecofemisnit Fables: How a Strategic Notion Rose and Fell. *Development and Change* 38(1): p67-85.

Matsue, N., Daw, T., Garrett, L. (2014). Women Fish Traders on the Kenyan Coast: Livelihoods, bargaining power, and participation in Management. *Coastal Management*, 42(6): 531-554.

McNally, C., Crawford, B. Nyari-Hardi, B., Torell, E. (2018). MSMEs/VSLAs Formative Evaluation Report. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_ACT153_CRC. 89 pp.

Mehta, M., Peacock, D., Bernal, L. (2004). Men as Partners: Lessons Learned from Engaging Men in Clinics and Communities. In Ruxton, S. (Eds.) *Gender Equality and Men: Learning from Practice* (pp. 89-100). Oxford, UK: Oxfam.

Ministry of Fisheries and Aquaculture Development (MOFAD). (2016). National Gender Mainstreaming Strategy for The Fisheries Sector. Accra, Ghana: Ministry of Fisheries and Aquaculture Development (MOFAD). GH2014_GEN006_MOFAD_ 47 pp

Ogden, Le. E. (2017). Fisherwomen—The Uncounted Dimension in Fisheries Management: Shedding light on the invisible gender. *BioScience*. 67 (2): pp111–117, <https://doi.org/10.1093/biosci/biw165>

Okyere Nyako, A., Owusu, A., and Torell, E. (2015) a. Gender Mainstreaming Strategy. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Hen Mpoano, and SNV Netherlands Development Organization. GH2014_GEN002_CRC. 16 pp.

Okyere Nyako, A., Owusu, A., and Torell, E. (2015) b. Gender Needs Assessment Report. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Hen Mpoano and Netherlands Development Organization. GH2014_GEN004_SNV. 17 pp.

Pomeroy, R.S., Andrew, N. (2001). Small-Scale Fisheries Management: Frameworks and Approaches for the Developing world. Oxfordshire, UK and Cambridge, MA: Cabi

- Schuttenberg H. Z. and Torrens-Spence G. J. (2017). Results chains and learning questions for SFMP's mid-term evaluation Workshop Report. USAID. 50pp.
- Rogers, E. (1995). *Diffusion of Innovations*. New York, NY: The Free Press.
- Snyder, K. (2010) "Gender in the Western Region: Report on two week visit to ICFG program 13 – 27 March 2010", WorldFish Center. USAID Integrated Coastal and Fisheries Governance Initiative for the Western Region, Ghana. 8pp.
- Torell, E., Owusu, A., and Okyere Nyako, A. (2016). *Gender mainstreaming in fisheries management: A training manual*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_GEN003_SNV. 20 pp.
- Torell, E., Owusu, A., and Okyere Nyako, A. (2015). *USAID/Ghana Sustainable Fisheries Management Project (SFMP), Ghana Fisheries Gender Analysis, 2015*, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GEN002. 21p.
- United Nations, 1986. *Report of the World Conference to review and appraise the Achievements of the United Nations Decade for the Women: Equality, Development and Peace: Nairobi, 15 – 26 July 1985*. United Nations Publication (Sales No. E.85.IV.10). New York, 1986, 304 pp.
- United Nations, 1996. *Report of the Fourth World Conference on Women, Beijing, 1 – 15 September 1995, provisional edition*, New York, 1995, 180 pp.
- United Nations Women, 2018. *United Nations Entity for Gender Equality and the Empowerment of Women: Gender Mainstreaming*. <http://www.un.org/womenwatch/osagi/gendermainstreaming.htm>
- HOFFMAN N, Volker (ed.) 2011: *Knowledge and Innovation Management. Module Reader*. Hohenheim University.
- USAID (2012). *United States Agency for International Development: Gender Equality and Female Empowerment Policy*. Washington DC.

APPENDIX A: QUESTIONS FOR KEY INFORMANT INTERVIEWS

SFMP- Accra Office

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. What are your roles here at the SFMP Accra office?
5. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
6. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project improved “well-being?”
 1. economic
 2. influence
 3. Camaraderie/network
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
7. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

SNV - Netherlands Development Organization

Roles:

1. Policy Development (Sara)
 - a. CLaT
 - b. Gender Mainstreaming (FC)
2. Institutional capacity development (Sara)
3. Stove development model (Benedicta)
4. Seafood Certification and labeling (Benedicta)

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
5. Sara, tell me a little about (if not answered above):
 - a. Organizational capacity development to improve DAA, CEWIFIA, and NAPFTA
 - b. CLaT Policy development and results
 - c. FC Gender mainstreaming policy development and results
 - d. FC trainings specifically (pg 45 2015-2016 Annual Progress report):
 - i. Do you think they now understand the importance of including male and female voices in the management process?
 - ii. Is there increased awareness related to gender inclusive management for the fisheries commission?
 - iii. How do you feel about the FC gender mainstreaming action plan?
 - iv. How do you think the FC feels about the gender mainstreaming action plan?
6. Benedicta, tell me a little about:
 - a. Stove Development
 - b. Seafood certification and labeling
7. Big picture Questions:

- a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Has the project improved wellbeing?
 - 1. economic
 - 2. influence
 - 3. camaraderie/network
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are they influencing compliance?
 - d. Are these results sustainable when the project leaves?
8. Specific Questions (If not answered above):
- a. Tell me about your work in relation to Improved legal enabling conditions for co-management, use rights and effort-reduction strategies.
 - i. Are women using improved fish processing techniques?
 - 1. Sustainable?
 - ii. Do they enjoy using improved fish processing techniques?
 - iii. Has there been an increase in the involvement of women as co-managers of fisheries resources?
 - iv. Has co-management gotten easier/increased?
 - v. Are there new legal conditions for women?
 - vi. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - vii. Have legal conditions been improved such that women have more access to use-rights?
 - viii. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - b. 2. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level
 - iv. with decision making? At the advocacy level?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?

9. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

SSG: SSG Advisors Incorporated

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
3. Tell me a little about (if not answered above):
 - a. Ahotor Stoves
 - b. micro insurance (M vs W)
 - c. In house calling network
4. Big picture Questions:
 - a. In your work with fisheries policy dialogues at the national level, have you seen a change in how people think about gender roles? or gender roles in general?
 - b. Has the change helped in the effectiveness of fisheries policies? Or fisheries in general? (influencing compliance?)
 - c. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Has the Project improved “well-being?”
 1. Economic
 2. Influence
 3. camaraderie/network
 - d. So women have a seat at the table, but are the conditions such that they can they actually lead management?

- e. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - f. Are these results sustainable when the project leaves?
5. Specific Questions (If not answered above):
- a. Tell me about your work in relation to 1. Improved legal enabling conditions for co-management, use rights and effort-reduction strategies.
 - i. Has there been an increase in the involvement of women as co-managers of fisheries resources?
 - ii. Has co-management gotten easier/increased?
 - iii. Are there new legal conditions for women, with relation to co-management?
 - iv. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - v. Have legal conditions been improved such that women have more access to use-rights?
 - b. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level
 - iv. with decision making?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?
6. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

DAA: Development Action Association

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
5. Tell me a little about (if not answered above):
 - a. Densu Delta
 - i. Your work in the past was mainly with women in agriculture, how did you achieve your success with DOPA?
 - b. CLaT
 - c. Stoves
 - d. Capacity development trainings for your organization
 - e. Capacity development trainings you have given
6. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project improved “well-being?”
 1. economic
 2. influence
 3. Camaraderie/network
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - e. Are these results sustainable when the project leaves?

7. Specific Questions (If not answered above):
 - a. Tell me about your work in relation to: Strengthened information systems and science-informed decision-making (*Densu water monitoring?*)
 - i. Have women been empowered through increased science based knowledge?
 - ii. To what extent have women become participants in data collection?
 - iii. Has this participation lead to strengthened science-informed decision making? Once they have the ability and the data, how do they use it? How has this empowered them?
 - b. Tell me about your work in relation to “Improved legal enabling conditions for co-management, use rights and effort-reduction strategies”.
 - i. Has there been an increase in the involvement of women as co-managers of fisheries resources?
 - ii. Has co-management gotten easier/increased?
 - iii. Are there new legal conditions for women, with relation to co-management?
 - iv. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - v. Have legal conditions been improved such that women have more access to use-rights?
 - c. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level
 - iv. with decision making?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?
8. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

NAFPTA: National Fish Processors and Traders Association

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. How have your activities involved Women, ensuring everyone has an equal voice and access to benefits?
3. Tell me a little about (if not answered above):
 - a. Smokers
 - b. Fisher to Fisher
 - c. Organizational Capacity development
4. How do we make NAFPTA a better organization?
5. Specific Questions (If not answered above):
 - a. 4. Management implementation as a result of SFMP
 - i. Are women using improved fish processing techniques?
 - ii. Do they enjoy using improved fish processing techniques?
 - iii. Do women have increased access to finance? Has this empowered them? How?
 - iv. Do women have increased access to alternative livelihoods options? What are they? Has this empowered them?
 - b. Tell me about your work in relation to “Improved legal enabling conditions for co-management”
 - i. Do women feel they have a seat at the table when it comes to fisheries policy? Is fisheries policy being written with them in mind?
 - ii. Has co-management gotten easier/increased?
 - iii. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - c. 2. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. In voluntary compliance in the fight against illegal fishing methods?
 - ii. In advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. In policy dialogue? At the management level?
 - iv. With decision making?

- v. In public support for rebuilding fish stocks?
- 6. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project improved “well-being”?
 - 1. Economic
 - 2. Influence
 - 3. Camaraderie/network
- 7. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

Hen Mpoano

Questions:

1. What does “Gender Mainstreaming” mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. How have your activities involved Women, ensuring everyone has an equal voice and access to benefits?
5. Tell me a little about (if not answered above):
 - a. Co-Management Policy Framework (ie, not just chief fishermen in charge, more open ended, now women can lead)
 - b. Citizen Watch
 - c. VSLAs
 - d. IUU fishing Advocacy
6. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Were the trainings established to accommodate women’s schedules?
 - iv. Has the project improved “well-being?”
 1. economic
 2. influence
 3. camaraderie/network
 - b. So women have a seat at the table, but can they actually lead management?
 - c. Are these results sustainable when the project leaves?
7. Specific Questions (If not answered above):
 - a. Tell me about your work in relation to 1. Improved legal enabling conditions for co-management, use rights and effort-reduction strategies.
 - i. Has there been an increase in the involvement of women as co-managers of fisheries resources?
 - ii. Has co-management gotten easier/increased?

- iii. Are there new legal conditions for women?
 - iv. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - v. Have legal conditions been improved such that women have more access to use-rights?
 - vi. Have new legal conditions enabled women to participate in effort-reduction strategies?
- b. 2. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
- i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level?
 - iv. with decision making? At the advocacy level?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?
8. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

Questions:

1. What does “Gender Mainstreaming” mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. How have your activities involved Women, ensuring everyone has an equal voice and access to benefits?
3. Tell me a little about (if not answered above):
 - a. Law enforcement activities
 - b. Advocacy Activities
 - c. CLaT
4. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Has the project affected well-being?
 1. Economic
 2. Influence
 3. Camaraderie/network
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - e. Are these results sustainable when the project leaves?
5. Specific Questions (If not answered above):
 - a. Tell me about your work in relation to 1. Improved legal enabling conditions for co-management, use rights and effort-reduction strategies.
 - i. Has there been an increase in the involvement of women as co-managers of fisheries resources?
 - ii. Has co-management gotten easier/increased?

- iii. Are there new legal conditions for women, with relation to co-management?
 - iv. Have new legal conditions enabled women to participate in effort-reduction strategies?
 - v. Have legal conditions been improved such that women have more access to use-rights?
 - b. 2. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level
 - iv. with decision making?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?
- 6. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

Daasgift

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
5. Tell me a little about (if not answered above):
 - a. Microfinance
 - b. MSME
 - c. Stoves
 - d. Business Development Training
6. Specific Questions (If not answered above):
 - a. Improving food security/empowerment
 - i. Do women have increased access to finance? Has this empowered them? How?
 - ii. Do women have increased access to alternative livelihoods options? What are they? Has this empowered them?
 - iii. Do men have increased access to finance and alternative livelihoods? Has this empowered their families?
7. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project impacted well-being?
 1. economic
 2. influence
 3. camaraderie/network

- b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - e. Are these results sustainable when the project leaves?
- 8. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

CEWIFIA: Central and Western Region Fish Mongers Improvement Association

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. What does “sustainable” mean to you?
3. “Empowerment?”
4. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
5. Tell me a little about (if not answered above):
 - a. CLaT
 - b. Stoves
 - c. Woodlot in Shama (gender breakdown)
 - d. Capacity development trainings for your organization
 - e. Capacity development trainings you have given
6. Specific Questions (If not answered above):
 - a. Improving food security/empowerment
 - i. Do women have increased access to finance? Has this empowered them? How?
 - ii. Do women have increased access to alternative livelihoods options? What are they? Has this empowered them?
 - b. Increased constituencies that provide the political and public support needed to rebuild fish stocks. Are women/women groups more involved:
 - i. in voluntary compliance in the fight against illegal fishing methods?
 - ii. in advocacy (what kind of advocacy?) Are they more involved in advocacy at the management level?
 - iii. in policy dialogue? At the management level
 - iv. with decision making?
 - v. in public support for rebuilding fish stocks?
 - vi. political support for rebuilding fish stocks?
7. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:

- i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project improved “well-being?”
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - e. Are these results sustainable when the project leaves?
8. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

GNCFC: Ghana National Canoe Fishermen's Association

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: "Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects." (UN WW, 2018)
2. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
 - a. Have your members' attitudes towards women changed as a result of SFMP?
 - b. Do you have women members?
 - i. Women do own canoes
 - c. Are there any women in leadership roles in your organization?
3. Tell me a little about (if not answered above):
 - a. Fisheries Dialogues
 - b. Closed Season
4. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project affected "well-being?"
 1. economic
 2. influence
 3. camaraderie/network
5. "By the end of the project, we expect to see an institutionalization of practices that increase women's participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities."

Fisheries Commission Regional Directors and Zonal Officers

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. Have you been involved in SFMP trainings related to gender?
 - a. What have been the effects of those trainings?
3. What trainings/activities have *you* done to mainstream gender?
 - a. What have been the effects of these trainings?
6. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance
 - iv. Has the project affected “well-being?”
7. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

UCC (CCM, DFAS): University of Cape Coast, Centre for Coastal Management, Department of Fisheries and Aquatic Sciences

Questions:

1. What does gender mainstreaming mean to you?
 - a. This is how SFMP defines it: “Gender Mainstreaming is a globally accepted strategy for promoting gender equality. Mainstreaming is not an end in itself but a strategy, an approach, a means to achieve the goal of gender equality. Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities - policy development, research, advocacy/ dialogue, legislation, resource allocation, and planning, implementation and monitoring of programs and projects.” (UN WW, 2018)
2. How have your activities involved Men and Women, ensuring everyone has an equal voice and access to benefits?
3. Tell me a little about (if not answered above):
 - a. Component two - Strengthened information systems and science-informed decision-making
 - b. Sheila’s work with DAA
 - c. Elizabeth’s work with the forensics guide
 - d. DOPA?
4. Is UCC convinced that extension agents should be continued into the future?
5. Sheila and Elizabeth:
 - a. How was your work at first, compared to now?
 - i. Ie, gender roles, working with fishermen
 - b. How about job satisfaction? Compared to now?
9. Specific Questions (If not answered above):
 - a. Tell me about your work in relation to: Strengthened information systems and science-informed decision-making (*Densu water monitoring?*)
 - i. Have women been empowered through increased science based knowledge?
 - ii. To what extent have women become participants in data collection?
 - iii. Has this participation lead to strengthened science-informed decision making? Once they have the ability and the data, how do they use it? How has this empowered them?
10. Big picture Questions:
 - a. Has SFMP given women the enabling conditions that will make increased leadership and decision making possible? Prompts: i.e. Tools and trainings to women *and men* that allow women to feel empowered to:
 - i. Use their voice
 - ii. Serve as leaders
 - iii. Influence fisheries policy compliance

- iv. Has the project affected “well-being?”
 - 1. economic
 - 2. influence
 - 3. camaraderie/network
 - b. So women have a seat at the table, but are the conditions such that they can they actually lead management?
 - c. Are women influencing compliance?
 - d. Are women actually managing a fishery? Are they involved in managing fisheries? At what levels?
 - e. Are these results sustainable when the project leaves?
11. “By the end of the project, we expect to see an institutionalization of practices that increase women’s participation in fisheries leadership roles – and showcase that women can play an important and powerful role in sustainable fisheries management, fisheries livelihoods and value chain improvements beyond their traditional post-harvest processing activities.”

Fishers and Fish Processors

Open ended, not Yes/No Questions, not leading Questions.

- 1. Tell me about the Sustainable Fisheries Management Project
- 2. Have you been involved with it?
 - a. Tell me about your time with the project.
- 3. Have you been involved in any gender trainings?
 - a. Describe what happened
- 4. What have you learned?
- 5. How have things changed?
- 6. Do you know about a fisheries policy that's about gender?
 - a. Explain it to me
 - b. How do you feel about it?
 - c. How does this policy affect your work?
 - d. Are there changes that would help you?

DOPA: Densu Oyster Pickers Association

- 1. Has anything changed this year with the mangroves/oysters in your community?
- 2. How did you achieve this?
- 3. Before DAA, what was your view of yourself?
 - a. Has this self-image changed? (self esteem)

4. What has changed
 - a. In you
 - b. Your family
 - c. Your community
 - d. The delta
 - i. Mangrove
 - ii. Estuary
 - iii. Oysters
 - e. Your country
5. How do men view this?
6. Have the changes lead to
 - a. Conflict
 - b. Respect
7. Do you know of the Oyster Fishery Community Based Management Plan for the Densu Delta?
 - a. Explain it to me
 - b. How do you feel about it?
 - c. How does this policy affect your work?
 - d. Are their changes that would help you?
8. Do you know of the Gender Mainstreaming Fisheries Policy?
 - a. Explain it to me
 - b. How do you feel about it?
 - c. How does this policy affect your work?
 - d. Are their changes that would help you?

APPENDIX B: KEY SFMP GENDER RELATED DOCUMENTS

Crawford, B., L. Gonzales, D. Amin, B. Nyari-Hardi, & Y.A. Sarpong. (2016) *Report on the Baseline Survey of Small Pelagic Fishing Households along the Ghana Coast*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP) Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_PGM187_CRC. 122 pp

Kent, K. (2015). Organizational Capacity Assessment Report for government and Public University Units. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island and SNV Netherlands Development Organization. GH2014_CAP003_SNV. 36 pp.

McNally, C., Crawford, B. Nyari-Hardi, B., Torell, E. (2018). *MSMEs/VSLAs Formative Evaluation Report*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_ACT153_CRC. 89 pp.

Okyere Nyako, A., Owusu, A., and Torell, E. (2015) a. *Gender Mainstreaming Strategy*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Hen Mpoano, and SNV Netherlands Development Organization. GH2014_GEN002_CRC. 16 pp.

Okyere Nyako, A., Owusu, A., and Torell, E. (2015) b. *Gender Needs Assessment Report*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Hen Mpoano and Netherlands Development Organization. GH2014_GEN004_SNV. 17 pp.

Torell, E., Owusu, A., and Okyere Nyako, A. (2016). *Gender mainstreaming in fisheries management: A training manual*. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014_GEN003_SNV. 20 pp.

Torell, E., Owusu, A., and Okyere Nyako, A. (2015). USAID/Ghana Sustainable Fisheries Management Project (SFMP), *Ghana Fisheries Gender Analysis*, 2015, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GEN002. 21p.