



USAID | GHANA
FROM THE AMERICAN PEOPLE

SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Learning Initiative on Women's
Empowerment, Access to Finance, and
Sustainable Fisheries
Ghana Case Study



MAY, 2020

THE
UNIVERSITY
OF RHODE ISLAND
GRADUATE SCHOOL
OF OCEANOGRAPHY



resonance
Frontier Market Solutions

This publication is available electronically in the following locations:

The Coastal Resources Center

http://www.crc.uri.edu/projects_page/ghanasfmp/

Ghanalinks.org

<https://ghanalinks.org/elibrary> search term: SFMP

USAID Development Clearing House

<https://dec.usaid.gov/dec/content/search.aspx> search term: Ghana SFMP

For more information on the Ghana Sustainable Fisheries Management Project, contact:

USAID/Ghana Sustainable Fisheries Management Project

Coastal Resources Center

Graduate School of Oceanography

University of Rhode Island

220 South Ferry Rd.

Narragansett, RI 02882 USA

Tel: 401-874-6224 Fax: 401-874-6920

Email: info@crc.uri.edu

Citation: USAID/SFMP. (2020). Learning Initiative on Women’s Empowerment, Access to Finance, and Sustainable Fisheries Ghana Case Study. The USAID/Ghana Sustainable Fisheries Management Project (SFMP). Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island and Resonance GH2014_ACT270_CRC. 30 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: Women in the community of Densu at a Village Savings and Loan Association meeting.

Photo credit: Doris Owusu

Detailed Partner Contact Information:

USAID/Ghana Sustainable Fisheries Management Project (SFMP) 10 Obodai St., Mempeasem, East Legon, Accra, Ghana

Raymond Babanawo	Chief of Party	raybabs.sfmp@crcuri.org
Kofi Agbogah	Senior Fisheries Advisor	kagbogah@henmpoano.org
Perfectual Labik	Communications Officer	perfectual.sfmp@crcuri.org
Mary Afua Asare	Monitoring and Evaluation Officer	mary.sfmp@crcuri.org
Brian Crawford	Project Manager, CRC	bcrawford@uri.edu
Ellis Ekekpi	USAID AOR	eekekpi@usaid.gov

Hen Mpoano
38 J. Cross Cole St. Windy Ridge
Takoradi, Ghana
+233 312 020 701
Kofi Agbogah
kagbogah@henmpoano.org
Stephen Kankam
skankam@henmpoano.org

SNV Netherlands Development
Organization
#161, 10 Maseru Road,
E. Legon, Accra, Ghana
+233 30 701 2440
Andre de Jager
adejager@snvworld.org

Friends of the Nation
Parks and Gardens
Adiembra-Sekondi, Ghana
+233 312 046 180
Donkris Mevuta
Kyei Yamoah
info@fonghana.org

Resonance
(Formerly SSG Advisors)
182 Main Street
Burlington, VT 05401
+1 (802) 735-1162
Thomas Buck
tom@resonanceglobal.com

CEWEFIA
B342 Bronyibima Estate
Elmina, Ghana
+233 024 427 8377
Victoria C. Koomson
cewefia@gmail.com

Development Action Association (DAA)
Darkuman Junction, Kaneshie Odokor
Highway
Accra, Ghana
+233 302 315894
Lydia Sasu
daawomen@daawomen.org

For additional information on partner activities:

CRC/URI:	http://www.crc.uri.edu
CEWEFIA:	http://cewefia.weebly.com/
DAA:	http://womenthrive.org/development-action-association-daa
Friends of the Nation:	http://www.fonghana.org
Hen Mpoano:	http://www.henmpoano.org
SNV:	http://www.snvworld.org/en/countries/ghana
Resonance	http://resonanceglobal.com/

ACRONYMS

CBFMP	Community-Based Fisheries Management Plan
CEWEFIA	Central and Western Fishmongers Association
CRC	Coastal Resources Center
DAA	Development Action Association
DOPA	Densu Oyster Pickers Association
DQF	Daasgift Quality Foundation
FAO	Food and Agriculture Organization of the United Nations
FoN	Friends of the Nation
GNCFC	Ghana National Canoe Fishermen's Council
HM	Hen Mpoano
NAFPTA	National Fish Processors and Traders Association
MOFAD	Ministry of Fisheries and Aquaculture Development
RAMSAR	Ramsar Convention on Wetlands of International Importance
SNV	Netherlands Development Cooperation
SFMP	Sustainable Fisheries Management Project
TRY	TRY Oyster Women Association, The Gambia
URI	University of Rhode Island
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Association

TABLE OF CONTENTS

ACRONYMS.....	iii
TABLE OF CONTENTS.....	iv
LIST OF TABLES.....	v
LIST OF FIGURES.....	v
SECTION 1: INTRODUCTION AND SITE CONTEXT.....	1
1.1 The USAID/Ghana Sustainable Fisheries Management Project.....	1
1.2 The Role of Women in Ghana’s Fishery Sector.....	2
1.3 Site Descriptions: Small-Scale Estuarine Ecosystems Applying Community-Based Fisheries Management (CBFM).....	2
1.4 Site Description: The Large-scale Small Pelagic Fishery Under National Centralized Management.....	5
SECTION 2: THE INFLUENCE OF WOMEN’S EMPOWERMENT ON FISHERIES MANAGEMENT.....	7
2.1 Factors Most Affecting Women’s Influence in Fisheries Management.....	7
2.2 Extent to Which Increasing Women’s Influence in Fisheries Governance Results in Increased Emphasis on Sustainability and Conservation.....	9
2.3 Pathways for Women’s Influence on Fisheries Governance.....	10
2.4 Conditions Under Which Increasing Women’s Empowerment Results in Stronger Fisheries Management Outcomes.....	12
SECTION 3: WOMEN’S ENGAGEMENT IN FISHERIES AS A PATHWAY TO EMPOWERMENT.....	14
3.1 Contribution of Increasing Women’s Capacities to Increased Use of Financial Tools Among Women.....	14
3.2 Contribution of Increasing Women’s Use of Financial Tools to Increased Women’s Economic Empowerment.....	15
3.3 Factors Most Increasing Women’s Economic Empowerment.....	15
3.4 Conditions Under Which Engaging Women in Fisheries Governance Increases Women’s Economic Empowerment Outcomes.....	16
SECTION 4: SYNERGIES ACROSS STRATEGIC APPROACHES.....	16
4.1 Synergies.....	16
4.2 Implementation Barriers.....	17
SECTION 5: CONCLUSIONS.....	18
5.1 Conclusions.....	18
5.2 Recommendations.....	20
REFERENCES.....	21
ANNEX 1. The Theory of Change – Results Chain.....	23
ANNEX 2. Notes on Methodology.....	24

LIST OF TABLES

Table 1 Summary of SFMP interventions in Learning Initiative CBFM sites3
Table 2 Summary of SFMP interventions in Learning Initiative large-scale small pelagic
fishery sites6

LIST OF FIGURES

Figure 1 Map of Ghana’s coast showing the locations of the three estuaries with CBFM.....3
Figure 2 Summary of the CBFM Plans for the three estuarine sites4
Figure 3 Location of SFMP activities along the coastline of Ghana6
Figure 4 USAID’s Seven Domains of Women’s Empowerment in Agriculture..... 12
Figure 5 The Ghana WLI Results Chain.....23

SECTION 1: INTRODUCTION AND SITE CONTEXT

1.1 The USAID/Ghana Sustainable Fisheries Management Project

The USAID/Ghana Sustainable Fisheries Management Project (SFMP), a six-year project (October 2014 – September 2020), aims to rebuild marine fisheries stocks and catches through adoption of responsible fishing practices. The project contributes to the Government of Ghana’s fisheries development objectives and the U.S. Government’s Feed the Future Initiative. The Coastal Resources Center at the University of Rhode Island’s Graduate School of Oceanography is the lead implementer of SFMP with a consortium of other international and local partners.

Working closely with the Ministry of Fisheries and Aquaculture Development (MOFAD) and the Fisheries Commission the project aims to end overfishing of key stocks important to local food security through achievement of the following intermediate results:

- Improved legal enabling conditions for co-management, use rights, and effort-reduction strategies.
- Strengthened information systems and science-informed decision-making.
- Increased constituencies that provide political and public support needed to rebuild fish stocks
- Implementation of applied management initiatives for several targeted fisheries ecosystems.

SFMP focuses on small pelagic fisheries along Ghana’s entire coastline as well as fisheries and essential mangrove fish habitat in three coastal estuaries - the Densu, Ankobra, and Pra systems. Additionally, SFMP supports improvements in the value chain of smoked fish, important to tens of thousands of women fish processors. The project is also undertaking actions to reduce child labor and trafficking in Ghana’s Central Region.

The SFMP case study examines learning questions on two hypotheses in two contexts: (1) small-scale estuarine ecosystems that applied community-based approaches to the management of finfish and oysters, and; (2) a large-scale fishery of migratory small pelagics, consisting mainly of anchovies and sardinella species that is under a national scale and centralized management regime. Interventions implemented through the Learning Initiative in Ghana for both types of fisheries included:

- Improving access to finance for women fish processors and traders through the establishment of Village Savings and Loan Associations (VSLA), and facilitating the acquisition of low interest loans from the Microfinance and Small Loans Centre;
- Developing women’s leadership skills and promoting gender inclusion in fishery decision-making and benefit sharing; and
- Improving businesses of women processors and traders through business, literacy, and improved post-harvest training.

The Ghana Learning Initiative Theory of Change Results Chain is presented in Annex 1. Ghana addressed the Learning Initiative questions using a retrospective approach, meaning that most of the interventions had already been implemented. For the estuarine sites, SFMP worked with a majority women fishery (oysters, in the Densu site) and with a mixed men and women fishery (finfish, in the Ankobra and Pra sites), which enabled a cross-site comparison. The small pelagic fishery was considered as a whole because men’s and women’s roles are similar across all sites. Estuarine and small pelagic findings are compared throughout this case study to highlight commonalities and differences. See Annex 2 for additional information on methodology.

1.2 The Role of Women in Ghana's Fishery Sector¹

There is a symbiotic relationship between men and women in the Ghanaian fisheries industry. Mainly, men fish and women do the marketing and processing. However, the roles are more complex. While fishing, the men form a crew of captain and fishermen. Some women do engage in direct harvesting in small water bodies, at the edges of lagoons, and in estuaries, where they collect oysters, crabs, and other fish species. Tradition and myths exclude women from going to sea to fish. Otherwise, women are engaged in every single step of the value chain. A number of women own fishing canoes/boats, and women normally finance fishing trips by providing money for fuel. Some women also pay for maintenance and repairs of boats and nets. These roles provide women with some influence in the fisheries sector.

Women and the few male fish marketers and processors start their “careers” as helpers or laborers, working for their mother, aunt, or sometimes someone outside their family. Male fish processors start their careers by helping their mothers smoke fish. In the best-case scenario, a woman will transition from a helper to marketing her own fish. However, an individual's ability to obtain and sell fish depends on the ability to invest in the fishing business of a fisherman, getting fish from a husband/son, or accessing credit to buy fish. In some families, the wife invests in her husband's fishing business to secure her position as the sole buyer/distributing agent of his fish. A woman has limited opportunities in the fishing economy if she does not have a husband or does not belong to a matrilineage. Women born into poor families, and who do not have husbands who can support them, are the poorest in the fishing communities, and they may be stuck as laborers for their entire working life. Most women manage to save some working capital (about \$50 – enough for a tray of fish) or access credit to buy their own processing equipment and over time, a few start to build more capital and grow the number of fishermen for whom they finance trips.

1.3 Site Descriptions: Small-Scale Estuarine Ecosystems Applying Community-Based Fisheries Management (CBFM)

The estuarine ecosystems are the Densu, Ankobra, and Pra estuaries (Figure 1). A summary of SFMP's interventions in the three estuarine sites is provided in Table 1 below.

SFMP facilitated the participatory process for developing and drafting co-management plans for each site in consonance with the [National Policy Framework on Fisheries Co-management \(MOFAD, 2019\)](#). The plans, summarized in Figure 2 below, grant *exclusive use rights to fisheries resources* in the management area to a community-based fisheries management association. Since 2017, communities have implemented the management measures specified in the plan with varied degree of voluntary compliance, while awaiting the approval of the National Policy Framework on Fisheries Co-Management by cabinet.

¹ Abstracted from the following reports: Torell, E., Owusu, A., and Okyere Nyako, A. (2015); Crawford, B., L. Gonzales, D. Amin, B. Nyari-Hardi, Y.A. Sarpong (2016); Friends of the Nation (2015).



Figure 1 Map of Ghana's coast showing the locations of the three estuaries with CBFM

Table 1 Summary of SFMP interventions in Learning Initiative CBFM sites

Location	Fishery	SFMP interventions	Women's roles in fishery	Men's roles in fishery	Population of women and men in the fishery
Densu Estuary, Greater Accra Region a. Tetegu b. Tsokomey	Oysters	<ul style="list-style-type: none"> Development and implementation of a co-management plan covering 5900 ha Mangrove reforestation Women's empowerment 4 VSLAs Training on post-harvest handling Donated boats to ease movement on the river 	Harvest, process, and trade	A few are oyster divers/harvesters	130 women oyster harvesters 10 men harvesters/divers
Ankobra Estuary, Western Region c. Sawoma Adelekazo	Tilapia, Catfish	<ul style="list-style-type: none"> Development and implementation of a co-management plan covering 5078 ha Mangrove restoration Women's empowerment 5 VSLAs Support with microloans Donated boats to ease movement on the river 	Harvest, buy, process, and trade	Fish and farm	370 total fishers 70 women 300 men
Pra Estuary, Western Region d. Anlo Beach e. Bosomdo	Tilapia	<ul style="list-style-type: none"> Development and implementation of a co-management plan covering 3190 ha Mangrove reforestation Leadership & empowerment 3 VSLAs 	Harvest, buy, process, trade fish	Fish and farm	300 total fishers 140 women fishers 160 men

	<u>Densu Delta Oyster Fishery Plan</u>	<u>Ankobra Estuary Plan</u>	<u>Pra Fishery Plan</u>
Management area	5,900 hectares	5,078 hectares	3,190 hectares
Mgt entity	Densu Oyster Picker's Association	Ankobra Community Based Fisheries Management Association	Pra Estuary Fisheries Co-Management Group
Mgt Committee	15 members (4 Male, 11 Female)	10 members (5 Male, 5 Female)	15 members (10 Male, 5 Female)
Communities	5	5	11
Members	>160 (10 Male, >150 Female)	>370 (Male = 300, Female = 70)	>300 (180 Male, >120 Female)
Purpose	Establish an ecologically and economically sustainable oyster fishery	Ensure that our estuarine fishery which has been our heritage is sustained for future generations	Ensure a secured and improved fishery livelihood in the lower Pra to reduce poverty and enhance food security through sustainable fishery practices
Biological goals	Maintain oyster stocks at levels that ensure sustained harvesting	Harvest large fish using large mesh size nets	Restore the tilapia fishery. Capture large tilapia using large mesh size nets
Ecological goals	Rehabilitate mangrove habitat to levels that ensure sustained harvesting	Maintain biological diversity through protection of estuarine fish habitats and nursery grounds. Protect, restore, and sustainably harvest mangroves	Restore degraded mangroves in and around identified breeding sites
Socio-economic goals	Improve the standards of living for local oyster harvesters through improved income levels and create supplemental employment opportunities for local resource users	Enhanced commercial value of fish; resilient livelihoods, improved food security and economic base of fisheries-dependent households. Reinstate traditional fisheries and mangrove system management norms	Improve living standards for local fishers by enhancing profitability of the fishery
Key resource management measures	7cm minimum oyster size limit Closed seasons: 5 months for reproduction and growth, 1 for traditional celebrations Restrict and regulate non-member access Limit volume and number of continuous harvest days Establish refugia Replant five acres with 15,000 mangroves Establish non-harvesting mangrove areas for first three years of restoration Identify oyster reef restoration areas	3 inches minimum mesh size 18cm minimum size for Croaker fish 1-3 month closed season in major tributaries at different times in the year No mangrove and bamboo harvesting or farming within a 30m buffer Expand mangrove restoration to degraded sites upriver. Include saba and palm tree. Regulate mangrove harvesting by quotas. Set criteria and restrict membership so fishery benefits are not dissipated to open access levels and incomes adequate for fishers	Sustainable harvesting of Tilapia. Permanent closure for all fishing in a 40.16 ha area 3 months closure for selected breeding grounds Nurse and plant mangrove seedlings in and around identified spawning sites, and up to 50m off river banks Regulate mangrove harvesting by quotas. Indicate no-go zones for mangrove harvesters

Figure 2 Summary of the CBFM Plans for the three estuarine sites

1.4 Site Description: The Large-scale Small Pelagic Fishery Under National Centralized Management

SFMP's main focus is to improve small pelagic fisheries management and strengthen governance to positively impact this fishery, which is considered the "people's fish" due to its importance nationally for food security and livelihoods. SFMP's focus on improved fisheries management and strengthened governance is important because Ghana's marine fisheries sector is complex and severely exploited due to the open access regime, poor governance, weak enforcement of rules, and provision of subsidized fuel to fishers.

Ghana has a coastline of about 55 km and maritime domain, including the territorial and exclusive economic zone of 228,000 km². The productivity of Ghana's marine fisheries is driven by a coastal upwelling, when cold water rich in nutrients are brought to the surface and stimulate the ecosystem. The high season for fishing is from July to September when there is a major upwelling and late December to early February when there is minor upwelling season.

Ghana's coastline spans across four administrative regions: Greater Accra, Western, Central, and Volta Regions and 21 coastal districts with 300 landing sites. According to the National Fisheries Management Plan 2015-2019, Ghana's marine fisheries capture sector consists of three main types of fishing fleets: 13,000 artisanal canoes, both wood- motorized and non-motorized; 403 semi-industrial boats, mainly wooden boats; and 127 industrial vessels that are generally over 25m length, made of steel hull, and have the capacity to operate in areas beyond national jurisdiction.

The MOFAD has oversight responsibility for the sustainable management of these fisheries resources and development of the fishing industry while the Fisheries Commission is responsible for implementation of all plans and policies developed by the ministry. SFMP has provided direct support to build the capacity of these two central government agencies and support implementation of the [National Fisheries Management Plan](#) to deliver on their mandate, in particular for the artisanal small pelagic fishery.

Across the four coastal regions SFMP implemented interventions, including:

- Policy Development: Development of a Gender Mainstreaming strategy, which the Ministry adopted in 2017; a Child Labor and Trafficking strategy, adopted by the Ministry in 2019; and a national co-management policy, approved by cabinet. Established a Scientific and Technical Working Group to advise the Ministry on fisheries management.
- Engagement: Engagement of fisherfolk through Fisher to Fisher dialogues; mass communication on the closed season, illegal, unreported, and unregulated fishing, and child labor and trafficking.
- Technical Assistance; Development of a clean fish smoker for adoption by fish processors; introduction of a fish certification scheme to promote the production and trade of quality fish; and establishment of two fish training centers in Central and Greater Accra regions.
- Access to Finance: Improved access to finance through establishment of 56 VSLAs and loans for 181 processors from the Microfinance and Small Loans Centre.

Table 2 below summarizes the SFMP interventions implemented in locations known for their active artisanal fisheries activities.

Table 2 Summary of SFMP interventions in Learning Initiative large-scale small pelagic fishery sites

Location	Fishery	SFMP interventions	Women's role in fishery	Men's role in fishery	Population of men and women in the fishery
Moree	Anchovies and small pelagics	Access to finance, women's empowerment, Fisher to Fisher	Finance trips, buy, process, trade	Fish	1936 total 424 women 1512 men
Mumford	Anchovies and small pelagics	Women's empowerment	Finance trips, buy, process, trade	Fish	211 total 120 women 91 men
Narkwa (Adukrom)	Anchovies and small pelagics	Access to finance (VSLA)	Finance trips, buy, process, and trade	Fish	144 total 72 women 72 men
Saltpond	Anchovies and small pelagics	Fisher to Fisher and Combatting illegal, unregulated, and unreported fishing	Finance trips, buy, process, and trade	Fish	100 total 84 women 16 men
Kormantir	Anchovies and small pelagics	No intervention (Control site)	Finance trips, buy, process, and trade	Fish	306 total 48 women 258 men

Figure 3 shows the location of SFMP activities. From 2015 – 2019, SFMP implemented over 936 activities with over 32,823 participants. Approximately 40 percent of the participants were male and 60 percent were female. Post-harvest activities had greater representation among women, and more men participated in the resource management activities.

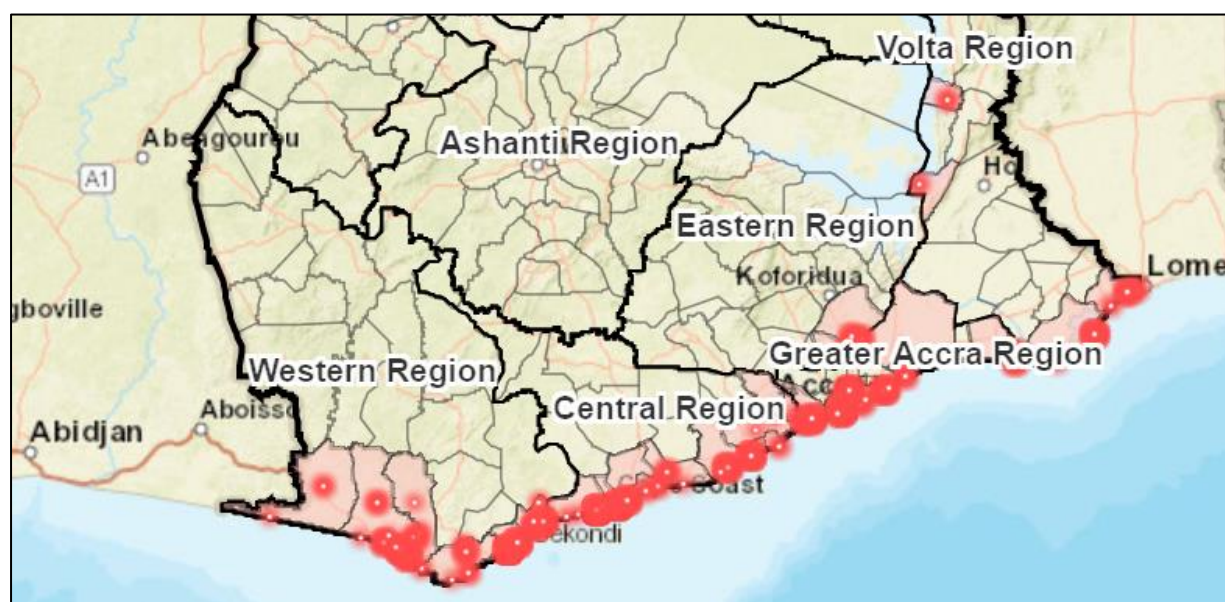


Figure 3 Location of SFMP activities along the coastline of Ghana ¹

In 2015, the then Minister of MOFAD, Madam Sherry Ayittey called for the establishment of the National Fish Traders and Processors Association of Ghana (NAFPTA) to enable the processors and traders to form one formidable advocacy group. She argued such a platform would enable members to channel their voices on matters of concern, especially illegal fishing practices. In March 2015, the association was inaugurated and leaders were elected. To date there are over 14,300 registered members and the association serves as a channel for

delivering support to processors from government and donors. CEWEFIA and DAA are also women led local regional associations that provide capacity-building support to fish processors across the Central, Western, and Greater Accra regions.

SECTION 2: THE INFLUENCE OF WOMEN’S EMPOWERMENT ON FISHERIES MANAGEMENT

2.1 Factors Most Affecting Women’s Influence in Fisheries Management

The theory of change of the Ghana/SFMP Learning Initiative illustrates how women’s strengthened capacities and improved access to finance will enable them to become better advocates for sustainable fisheries management (see Annex 1).

In small-scale estuarine ecosystems, organization under community-based fisheries resource management associations has positively affected women’s access to increased capacities overall (technical, leadership, and advocacy), which resulted in women’s increased engagement in fisheries governance and influence in fisheries management.

Until 2012, harvesting of mangrove oysters in the Densu estuary was a full-time job and an important source of protein and nutrition for women. Oyster stocks have significantly dropped as a result of an increase in the number of harvesters and threats to oyster habitat, including the dumping of waste into the river.

SFMP partnered with DAA and the Fisheries Commission to help oyster pickers along the Densu Estuary share and document their local knowledge. As a result, women recognized their collective interest in reversing these trends and organized themselves into the Densu Oyster Pickers Association (DOPA). SFMP supported the women to develop an organizational charter and standard operating procedures, form a steering committee, and receive training on oyster habitats and reproduction. The women received training, as outlined in Table 1 above, to build their self-esteem and develop the confidence to participate in decision making in the community. SFMP also encouraged the women to share their traditional knowledge in an inventory of targeted species, identification of rich spawning grounds, and development of protective measures. Today, DOPA’s membership includes over 150 women and 10 men who make decisions about the sustainable management of oysters.

In November 2017, DOPA made a significant first-time decision to close their oyster grounds to harvesting for five months. This decision was based on scientific data, including the time necessary for the oysters to spawn and grow bigger. “The closed season was a critical turning point for us. When we reopened, I harvested larger volumes of oyster and doubled sales from GHS 40 (\$10) to GHS 80 (\$20) per day. Now the oysters look bigger and more attractive than before. We want the closed season to happen every year,” says Bernice, a mother of three.

Bernice and others in DOPA are now optimistic about the future of oyster harvesting in their communities, as they work to reinforce an annual closed season (currently in its third year) to increase their harvest and improve their livelihoods. Implementing the closed season also meant that the DOPA women were exercising their fisheries use rights and management responsibilities in a very visible and public manner. This further reinforced their advocacy and leadership capacities.

In small-scale estuarine ecosystems, the strength of women’s influence in fisheries management seems to be determined by the extent to which community-based resource management associations are led by and have a strong majority membership of women and focus on management of a species that is traditionally harvested almost exclusively by women.

Where relatively equal numbers of women and men together are managing a portfolio of species that is not exclusive to women, women's engagement in and influence on fisheries management appears to be disproportionately weak compared to their representation.

Following the success of the implementation of co-management in the Densu Estuary, SFMP and its partners (Hem Mpoano and Friends of the Nation) replicated community-based management in the Ankobra and Pra estuaries where women harvest 'baby' tilapia, shrimps, and periwinkles. However, these estuaries were not as successful in community-based management as the Densu estuary. For example, a key informant in the Pra Estuary said the co-management committee had not met in the last year since SFMP support to Friends of the Nation ended in 2018, suggesting a lack of motivation and/or resources to further engage. In addition, some fishers in the estuary said they do not know of any management measures apart from the mangrove replanting. Fishers also continue to fish with small mesh nets and to use dangerous chemicals. Although there are 13 women on the 25 member co-management committee, key informants said women usually lack the confidence to speak at meetings when men are present.

In the large-scale small pelagic fishery, organization under a women's national association of processors and regional associations of women processors, has positively affected women's access to increased capacities overall (i.e., technical, leadership, advocacy). Women's increased capacity resulted in some level of engagement in fisheries governance, and still very limited influence in fisheries management.

In the large-scale pelagic fishery, management is highly centralized through the MOFAD and Fisheries Commission. Although the Ministry is headed by a female Minister, there is no female representation on the Commission. Women comprise 20 percent of the membership of the Ghana National Canoe Fishermen's Council, which is the umbrella body for all canoe owners in the artisanal sector; however, there is no representation of women on the executive council.

In contrast to the estuarine ecosystem, where women are gleaners and involved in fisheries governance, in the large-scale small pelagic fishery, men are mostly involved in marine fishing while women are generally engaged in processing and marketing.

Although women own boats and fund fishing trips, women are not able to dictate the fisheries methods used by the fishermen who are indebted to or employed by them. According to one female boat owner in Tema, her boat now lies idle because no fisherman wants to work for her as she insists she does not want her crew to use illegal methods to harvest fish, which seem to be the new norm.

Over the last five years, SFMP supported the national and regional women's processor associations with capacity development and women, through these associations, received the trainings outlined in Table 2 above to increase their capacities. For instance, in 2017, NAFPTA launched the "say no to bad fish" campaign to educate its members to refrain from buying juvenile fish or other fish harvested illegally with chemicals. Fish processors have also participated in Fisher to Fisher dialogues, a platform for discussion and communication to policymakers on fisheries management measures at the community level.

NAFPTA is also a member of the Science and Technical Working Group hosted by the Fisheries Scientific Survey Department of the Fisheries Commission that reviews stock assessments and socio-economic research and provides evidence-based recommendations for management of the fishery to MOFAD. As a result, in 2018 when the first closed season was announced, NAFPTA organized a press conference in Accra to voice their support. They articulately argued that since they were the managers of the household, the current low fish

catch was affecting the women more, and so fishermen should support the MOFAD to implement the closed season to enable fish stocks to recover.

Due to their increased technical capacities, women are realizing the negative impacts of illegal fishing on their household income, livelihoods, and food security and openly express their desperation for change. Yet, when necessary, they struggle to make their voices heard in fisheries management decisions. Due to their traditionally defined roles, women have no control over the choice of methods for harvesting fish, the gears deployed by fishermen, or key fisheries management decisions, such as illegal methods of harvesting fish, even though they impact on the quality of fish harvested, post-harvest processing, pricing and the overall profitability of the business.

In the large-scale small pelagic fishery, economic empowerment has not affected women's influence in fisheries management due to traditional gender roles and cultural norms.

As illustrated in Section 1.2, women's role in the fisheries sector in Ghana limits their influence in the large-scale small pelagic fishery. Despite SFMP's support, which has successfully contributed to economic empowerment for women fish processors, their influence has not significantly increased outside of the post-harvest domain. Women continue to lack a voice in how fishing is conducted and whether sustainable practices are adopted at sea, even when they own the canoe or finance the fishing trips.

2.2 Extent to Which Increasing Women's Influence in Fisheries Governance Results in Increased Emphasis on Sustainability and Conservation

In small-scale estuarine ecosystems, both women's and men's influence and the emphasis on conservation and sustainability has increased dramatically from 2015 – 2020. Key enabling conditions include gender inclusivity, a rights-based approach, a combination of local and scientific knowledge on protecting habitat and reproductive capacity of the resource, and ability to negotiate with a collective and representative voice.

Women's influence in fisheries governance reinforced the shift towards sustainability and conservation most strongly in the Densu estuary, a site with a women-dominated fishery and a woman-led co-management process.

The vertical integration of the Densu oyster fishery, with women dominating and benefiting from every node in the value chain from harvest to market, also favors increased emphasis on conservation and sustainability. Vertical integration gives responsible resource managers more opportunities to benefit from a thriving resource, incentivizing sustainable management.

In the Densu, DOPA members have knowledge on oyster ecology and biology and collect scientific data on water quality. Complementing this scientific knowledge with traditional knowledge they created refugia for oysters that otherwise would have died off during the rainy season when fresh water is released from the Weija Dam. Establishing spatially defined refugia protected from any kind of activity has been difficult as their exclusive use rights are for the oyster fishery (once the plan is signed), not for the estuary. Still, DOPA members continue to protect the resource. As the women see the results of effective resource management measures, they are encouraged to continue these efforts even without program support. DOPA members are currently in their third year of implementing an annual closed season.

As already established, women's influence in fisheries management is strongest when women are the dominant users of the resource and managers of its governance mechanism. In the Ankobra and Pra estuaries, where various fisheries resources are managed jointly by men and

women, women tend to let men lead on matters that affect the fisheries. In the Ankobra and Pra estuaries, women have other occupations (e.g., farming) and do not solely depend on the fishery, which likely contributes to their comparatively limited interest in fisheries management. In contrast, in the Densu, the emphasis on conservation and sustainability has increased dramatically due to the lack of alternative livelihoods.

In the large-scale small pelagic fishery, women's influence has increased in a limited way from 2015 – 2020, while emphasis on conservation and sustainability has increased to a greater extent. Women's influence shifts towards sustainability but is one of many factors.

In the small pelagic sector, women led by the 'konkohemaa' at the landing beaches negotiate prices with the men fishers but are not involved in fisheries governance. Despite NAFPTA's "no bad fish" campaign, participation in the Scientific Technical Working Group, and public support for the closed season, women still buy poor quality fish harvested illegally because they need the income to feed their families. At the same time, these women privately express despair over the poor quality of illegally harvested fish.

The centralized management nature of the small pelagic fishery, therefore, diminishes the influence of women whose roles have already been defined by culture and tradition and who are only seen as indirect beneficiaries of the resource.

2.3 Pathways for Women's Influence on Fisheries Governance

Women as leaders and constituents: Women's influence in fisheries governance is stronger when they are leaders than when they are constituents. In the small-scale estuarine ecosystems applying community-based fisheries management, the scope and importance of women's roles in the fisheries sector is increasingly being recognized, documented, and valued on both socio-economic and environmental measures. Women emerged both as leaders and constituents in the Densu, Ankobra, and Pra estuaries fisheries management planning processes. As discussed above, in the Ankobra and Pra estuaries where co-management committees are mixed gender, women's participation and leadership, and subsequently, their influence is much less than in the Densu, where men play only a supporting role. In the large-scale small pelagic fishery, women are mainly constituents. They increasingly express their opinions, but they have limited influence on fisheries management decisions. Their leaders have largely failed to galvanize their constituents to effectively participate in decision-making processes and take ownership of opportunities offered to them. This limited participation is perhaps due to women's low literacy rates and failure of the few women leaders to nurture the leadership qualities of their constituents.

Women as resource stewards: Women's influence in fisheries governance through their role as resource stewards is strong when they are direct harvesters of a fishery resource, especially when women are the dominant harvesters of the resource. When women are direct harvesters, they exhibit both an economic and emotional attachment to the resource that motivates them to protect it at any cost. In the Densu estuary, for instance, most women prioritize household food and income security. Women therefore want to ensure that the fishery, which is the source of their livelihood, is protected to ensure a sustained income. In the more rural estuarine ecosystems, women are direct harvesters of fishery resources and of the mangroves that are essential habitat for estuarine fisheries. Women collect firewood daily for household chores and cooking. As a result, they are also involved in the nursing and replanting of mangroves, becoming stewards of these forests. Without women's role as resource stewards, the mangroves and associated fisheries habitat would be harvested or destroyed for development.

In the large-scale small pelagic fishery, women are secondary beneficiaries and, therefore, do not have a pathway to influence fisheries governance as resource stewards. These women lack a say in what method fishers' use in harvesting, underscoring the finding that women's influence in fisheries governance is limited in situations in which women are not playing a stewardship role.

Women in processing and trade: Women's influence in fisheries governance through their role as processors and traders is potentially strong. Women are the primary processors and marketers of the majority of harvested fish. The economic value of the sector is, therefore, determined by the knowledge, technologies, and trade platforms available to these women. If women can improve the quality of the fish harvested, they can earn better margins. Women can then advocate for stronger management and fishing effort reduction measures, or contribute to improved compliance on existing reduction measures, by mitigating short term economic impact on their household incomes and food security.

The introduction of fish training centers run by CEWEFIA and DAA have helped women to identify and implement different ways to add value to oysters beyond smoking and stringing on a stick to sell by the roadside. Now, women sell oysters fresh in ice boxes or jars in brine, smoked and milled into powder or packaged in snack boxes. In the Pra, women fry the 'baby' tilapia and smoke the shrimps to sell at the Kasoa market, while those in Ankobra who have no access to refrigeration or smoking technologies sell them fresh at lower prices. These improved techniques have created new market opportunities for the women, contributing to their potential to then influence fisheries governance.

In the large-scale marine fishery, women fish processors have been at the forefront in the production and trade of quality smoked fish in Ghana by adopting the Class I Certification scheme for processed fish. Thirteen kitchens were certified in 2019, while 100 processors were financed to upgrade processing sheds and acquire hand washing stations. As women strive to process and trade quality fish for better incomes, they will support sustainable fisheries management measures (such as a reduction in the use of chemicals or light for fishing) which is the first step towards the production of quality fish.

As domestic markets for fish in Ghana and the West African region expand, women fish processors and traders are positioned to play key leadership roles in this growth. The contribution of women traders to fisheries value chains and their unique role in providing food security is vital for equitable fisheries development, economic and nutritional stability, and informed fisheries management.

The strengths and weaknesses of different pathways for women's influence on fisheries governance are greatly influenced by the type of fishery. Women have pathways to influence fisheries governance as constituents and as processors and traders in both small-scale estuarine ecosystems and large-scale small pelagic fisheries. Women's pathways to influence as leaders and resource stewards are strongest in the small-scale estuarine ecosystems in women dominated fisheries, where the impact on fisheries governance can be significant within the limited scope and scale of this type of fishery. Women's pathway to influence as processors and traders is strongest in the large-scale small pelagic fishery, where the scope and scale is much greater but the impact on fisheries governance may not be as direct or profound.

2.4 Conditions Under Which Increasing Women’s Empowerment Results in Stronger Fisheries Management Outcomes

Small-scale estuarine fisheries co-management planning processes and draft co-management plans developed in Ghana increased women’s empowerment on all seven USAID Domains of Women’s Empowerment in Agriculture (see Figure 4) and resulted in approximately 13,900 hectares of coastal wetlands and fisheries under improved management.

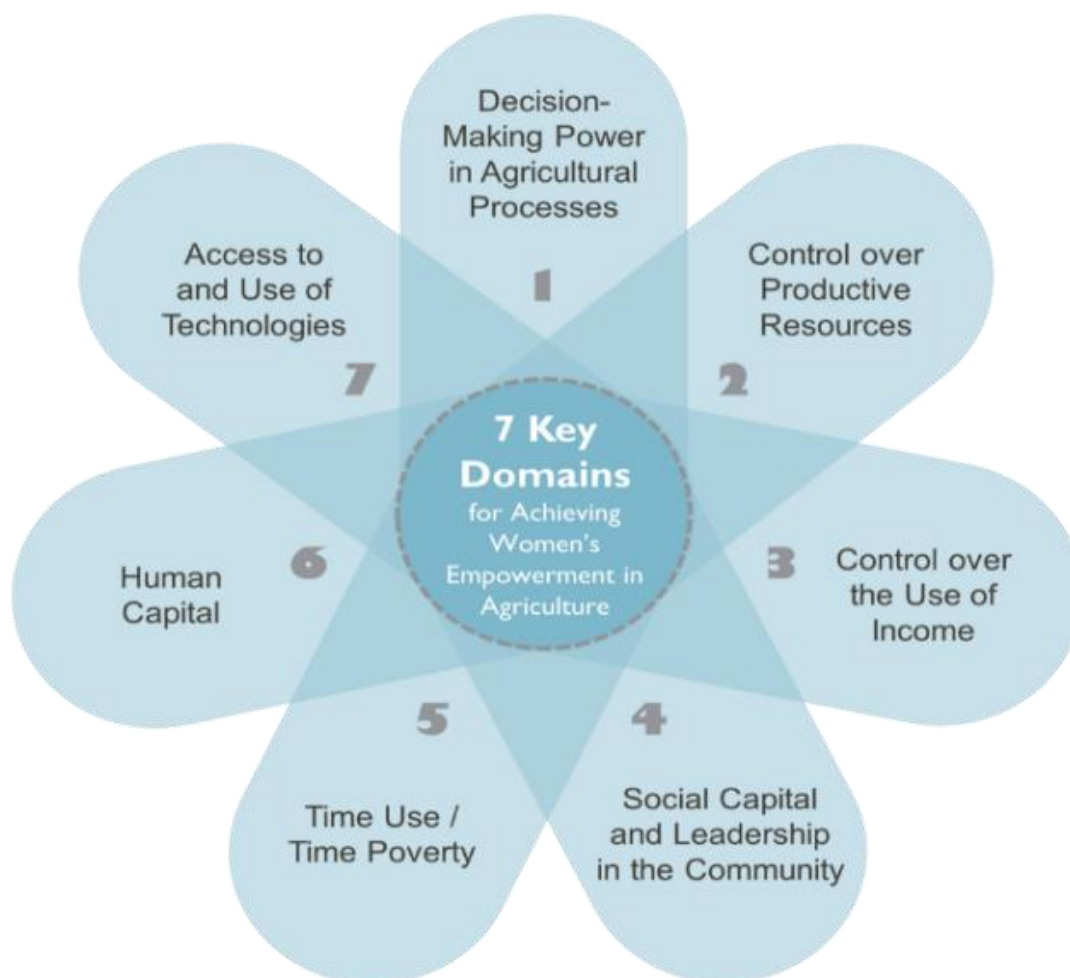


Figure 4 USAID’s Seven Domains of Women’s Empowerment in Agriculture

Domain 1 - Decision-Making Power in Processes: In the Densu, Ankobra, and Pra fisheries co-management processes and draft plans, women and men formed associations through which they are represented and are exercising decision-making power, to varying degrees.

Domains 2 and 3 – Control over Productive Resources and Control over the Use of Income: In the estuarine fisheries co-management plans, women (and men) are delegated management responsibility and exclusive use rights to the designated fisheries. Microfinance and VSLA interventions provided further control over productive resources and control over use of income. The 2020 Learning Initiative survey revealed that 90 percent of women have control over the use of their income and do not necessarily need their husband’s permission to spend money.

Domain 4 – Social Capital and Leadership in the Community: Capacity development activities and membership in fisheries co-management associations and VSLAs increased social capital and leadership in the community.

Domain 5 – Time Use, Time Poverty: Rebounding fisheries stocks have reduced the time needed to harvest a given unit of fish and improved value chains have increased the revenue per kilogram of fish harvested. In addition, the Ahotor improved fish smoking oven enables women to undertake other household chores while smoking fish, saving them time.

Domain 6 – Human Capital: Training in leadership skills, including ‘how nam’ dialogues², business skills, water quality testing, and other capacity development activities increased women’s human capital.

Domain 7 – Access to and Use of Technologies: Fisheries, closed seasons, fish and mangrove quotas, water quality testing, Ahotor oven technology, hygienic fish handling techniques, and VSLAs are examples of increased access to and use of technologies by women.

Key improved resource management measures put in place for the three small-scale estuary plans are documented in Figure 2 in Section 1. The most significant improved resource management measures are the closed seasons, which have been implemented for three consecutive years with high voluntary compliance in the Densu and varying success in the Ankobra and Pra. Mangrove restoration and protection measures have also been successfully implemented in the three locations.

Additional conditions under which increasing women’s empowerment results in stronger fisheries management outcomes are the same as those that result in stronger women’s influence in fisheries governance:

- When women’s empowerment is focused on improving management of a resource where women are the fishers/gleaners, where they dominate already and their empowerment is not seen as a loss or threat to the power of others.
- When women’s role in the value chain is vertically integrated, giving them more opportunity to benefit from improvements at various nodes, avoiding capture of most of the benefits of sustainable management by others at the middleman (processor/trader), or marketing level.

In the large-scale small pelagic and small-scale estuarine fisheries increasing women’s empowerment creates an enabling environment for stronger fisheries management outcomes.

This enabling environment is created when:

- Women are assisted in the formation and operation of self-help groups which serve as a solidarity platform.
- Women are encouraged to participate in national and regional networks of community management practitioners that promote the exchange of information and lessons learned and give them a voice in changing the fisheries sector. Examples include study tours to Gambia, Senegal, and the Volta Region, which empowered women as they saw the success of other women and were then able to emulate them. These practices included supportive relationships between fisheries landing site agents and women fish processors, a modern processing center led by women artisanal

² ‘How nam’ dialogues are customized leadership trainings for fish mothers (konkohemaa).

processing groups, and widespread use of good practices in fish handling and hygiene, such as systematically raising fish off the ground for handling, drying, and marketing.

- Women's entry into formal markets and profitable businesses is supported through the introduction of hygienic fish handling trainings, and the Class 1 Certification scheme aimed at promoting the production and trade of healthy and quality fish in Ghana and beyond.
- Stakeholders such as MOFAD and civil society organizations are provided with gender training and sensitized on gender policy issues that promote equitable access and control.

Female stakeholders in the fisheries sector were, until the 1990s, invisible in official statistics because of a lack of data disaggregation. Consequently, fisheries managers and policy-makers lacked data on women in the fisheries sector. In recent times, more efforts have been directed to making women's roles more visible. SFMP and other donor funded projects like Environmental Justice Foundation, for instance, have stressed the important role of women in fisheries, but more from the perspective of their contributions to processing and marketing and less from the perspective of their capacity to influence decisions in the management of the large-scale small pelagic fisheries.

SECTION 3: WOMEN'S ENGAGEMENT IN FISHERIES AS A PATHWAY TO EMPOWERMENT

3.1 Contribution of Increasing Women's Capacities to Increased Use of Financial Tools Among Women

Training women in business and financial management skills, especially on the need to defer consumption and save, and introducing women to financial management tools resulted in increased use of VSLAs by women in small-scale estuarine and large-scale small pelagic fisheries from 2015 – 2020. Increased use of VSLAs by women is self-replicating because it is a financial tool well aligned to women's capacities and the lack of access to other financial services in rural and remote areas.

Women led fish processing businesses in Ghana are usually on a micro to small-scale and rely on family members as employees. In most instances they do not keep records or have bank accounts for their businesses. SFMP trained over 4,000 women on business and financial management skills and introduced them to four financial tools:

1. VSLAs (micro savings groups)
2. Fishers Future Plan (Micro savings and insurance)
3. mobile money
4. micro loans through Daasgift Quality Foundation and the Microfinance and Small Loans Centre

In the Ankobra Estuary, Daasgift Quality Foundation supported about 500 women in Sanwoma with micro loans. While in the hard to reach upstream communities of the Ankobra, Anlo Beach in the Pra and the Densu, SFMP set up VSLAs. Over 1,000 women are currently part of 52 VSLAs in the four coastal regions. Out of the 3,500 fisherfolk who signed up for the Fishers Future Plan, 56 percent are women, while 180 women also received loans from the Microfinance and Small Loans Centre. All women who took loans have paid in full and requested a second tranche. Forty percent of women who use phones also use mobile money to receive and send remittances, receive sales, or pay for fish bought. All the communities now have increased access to finance, a phenomenon that was non-existent in the past.

3.2 Contribution of Increasing Women's Use of Financial Tools to Increased Women's Economic Empowerment

Women's ability to make their own decisions is mainly determined by the amount of resources they have. Increasing women's use of financial tools is enabling women to accumulate wealth and/or assets; afford basic household expenses, such as education and health; and expand working capital.

In the Ankobra, one of the VSLAs used their savings to purchase a copra processing machine to process coconut oil for sale. The machine has become another source of income for these women. Prior to the introduction of VSLAs, most women would have been idle or accessing credit at microfinance institutions at high interest rates. Ninety percent of them are now able to mobilize their own working capital to buy and smoke anchovies for sale or engage in petty trading. Those who accessed the Microfinance and Small Loans Center loans were able to continue working by purchasing frozen fish to smoke and sell during the closed season.

The use of financial tools introduced by SFMP has had transformative impact on the women's ability to withstand shocks, such as the introduction of the closed season.

Some VSLA members scheduled to share out their savings a month before the closed season, so they can buy, smoke, and stock fish for sale during the closed season for higher prices.

Generally, women who use financial tools, such as VSLAs and microfinance, are more economically empowered and resilient to income disruptions.

3.3 Factors Most Increasing Women's Economic Empowerment

To enable women in fisheries to access economic opportunities available to them and make decisions concerning their livelihoods, two factors are critical: 1) protection of their livelihoods through an increased stability in the supply of fish and 2) the use of financial tools that protect their incomes.

It is the combination of these two factors that most afford women economic empowerment. Building their capacities without a corresponding guarantee of fish supply to process and trade will not increase women's economic empowerment. This strong link between the two factors is less pronounced in the Ankobra and the Pra as women in these estuaries are also farmers. In the Densu and the large-scale marine fishery where the women tend to rely on the availability of oysters and small pelagic fish, these two factors increased their economic empowerment.

A good example of the impact of this combination of factors (fish supply stability and tools to protect income) on women's economic empowerment is the current president of NAFPTA – Madam Regina Solomon. She bought two canoes 15 years ago when fish catch was high and regular. She opened a bank account and saved any surplus income to acquire other assets. As her income increased, she can now afford to take a day off from fish trading to participate in capacity-building trainings that her 'poorer' peers cannot attend because they cannot afford to lose a day's income. When NAFPTA was formed, she had the confidence to stand for election, knowing she had her the respect of her peers. She has been the president of the association since its inception and has championed the fish certification scheme as one of the means for women to improve their incomes through the production of quality fish for formal markets.

3.4 Conditions Under Which Engaging Women in Fisheries Governance Increases Women's Economic Empowerment Outcomes

Engaging in a fisheries co-management planning process and establishing fisheries management associations involving women in each of the three small-scale estuaries produced women's economic empowerment outcomes in the woman-dominated oyster fishery but not in the two mixed gender finfish fisheries. In all sites/fisheries, there is still a need to increase the capacities of women on advocacy and negotiation skills to utilize opportunities in their communities.

The estuarine fisheries co-management plans formally include women in decision-making on fisheries resources, a change from their traditionally delineated role in fisheries. In the Densu, where women are the primary oyster fishers, their potential to achieve increased economic empowerment outcomes has already been realized in some ways (improved post-closed season harvests, sales, and revenue) and remains promising. In the Ankobra and Pra, traditional cultural norms are more difficult to change in a mixed gender management structure where fisherfolk are also farmers. In all cases, women are still able to make personal choices and decide on matters that affect their own wellbeing.

In the large-scale small pelagic fishery, engaging women in post-harvest processing improvements and increased use of financial tools increased women's economic empowerment outcomes. Engaging women in small pelagic fisheries governance did not result in increased women's economic empowerment outcomes.

However, women now understand the intricacies of small pelagic fisheries management measures and are able to educate their peers, households, and communities. In Mumford, where women benefited from women empowerment interventions (see Table 2), a few of the women who are more literate have found a way to voice their opinions and gain influence in small pelagic fishery management. Madam Florence Arthur, who is a fish processor and a member of DAA, has also been trained by MOFAD as a technical field officer. She attributes her ability to advocate for better fisheries practices to the knowledge she gained from DAA trainings. She has formed a seven-member all women task force that inspects fish in all the canoes before they are landed for sale at her local fish landing beach. There have been occasions when she has stopped processors from buying juvenile fish and even turned away canoes that had illegally harvested fish to the point of incurring the wrath of the chief fisherman and her peers.

SECTION 4: SYNERGIES ACROSS STRATEGIC APPROACHES

4.1 Synergies

In the small-scale estuarine communities, access to finance, women's empowerment, and fisheries management interventions were implemented in an integrated fashion. This integrated approach is effective as women are leading in the conservation of the small estuarine resources and have proven to be better managers.

As the women participated in the formulation of the management plans, they simultaneously participated in activities designed to increase their empowerment, such as trainings on leadership, team building, and post-harvest. This strategy reduced the frequency with which women were called for trainings, freeing them to engage in other activities and practice the knowledge acquired in these trainings before the next session.

Women in Sanwoma community in the Ankobra, which is more urban, benefited from microloans and other empowerment interventions, while more rural communities upstream have the oldest VSLAs set up in 2016. These VSLAs were replicated to 11 groups as of January 2020.

The VSLAs have also become solid platforms for the delivery of other health and population interventions to women and adolescents by other programs, including the USAID funded Integrating Health and Family Planning into Greater Amanzule Wetlands Landscape Conservation and Small-scale Fisheries Management in the Western Region of Ghana.

The traditional custodians of the Densu river now recognize the DOPA as the ‘managers’ of the estuary. This recognition is very rare in the traditional practices of the people of the Greater Accra Region

In the large-scale marine fishery, the women’s empowerment and fisheries management interventions were implemented separately without the access to finance interventions, which was added on in mid-2019, except in Moree where implementation of all three interventions was done simultaneously.

In 2019, the women in Narkwa and Moree were set up with VSLAs and loans from Microfinance and Small Loans Center. Prior to the introduction of access to finance interventions, women in Moree were sometimes reluctant to attend capacity-building trainings as they complained it took them away from their business without a corresponding financial reward. The women are now more welcoming of project activities and even encourage their peers to join in as they realize the gains from the interventions they have received.

Implementing these approaches in an integrated manner in Moree has helped SFMP to save time and resources to extend the VSLA interventions to 481 women instead of the 375 originally planned and also realize sustained outcomes on interventions with women in the last six years. The women in Moree who benefitted from all of SFMP’s interventions are more assertive and able to articulate the SFMP’s objective of supporting the Government Ghana to rebuild Ghana’s fish stocks, compared to those in Narkwa, Mumford, Saltpond or Kormanstir who benefitted from only one intervention.

4.2 Implementation Barriers

Low literacy levels and women’s traditional roles have been major barriers in advocating for women’s influence in fisheries.

Women are still less assertive than men at playing a leadership role or leading discussions on sustainable fisheries management. In Ankobra and Pra particularly, which are more rural and have more pronounced patriarchy, women still expect men to lead and are less assertive in discussions on fisheries management. Even in the all-female led constituency in the Densu the women still look for ‘guidance’ from the few men in the group when they need to engage with the traditional authority or with the municipal council on issues with dumping of waste or illegal harvesting of mangroves by non-members.

Low literacy levels among women also affects the delivery of interventions, especially those that rely on the leveraging of technology such as use of digital financial tools that give women greater control of their resources.

Women in fish processing learn the trade from a relative at an early age without the opportunity to seek formal education or drop out of school at a young age. As a result, women grow up lacking critical skills necessary to use simple technologies. These lack of skills further limit women's use of technologies and the benefits from using such technologies. For instance, in West Africa, studies have shown that the use of mobile money rather than physical cash can increase household savings by more than one-fifth and can help to reduce extreme poverty, and increase household bargaining power for women ([Acker et al., 2016](#)). When women lack the skills to use mobile money, they miss out on the benefits of this technology. Leaders have largely failed to galvanize their constituents to effectively participate in decision-making processes and take ownership of opportunities offered to them. This limited participation is perhaps due to women's low literacy rates and failure of the few women leaders to nurture the leadership qualities of their constituents.

Women leaders have failed to nurture the leadership qualities of constituents.

SFMP has over the years worked to build the capacity of women leaders in the fisheries associations. According to NAFPTA's constitution, the term of office of the current executives elected in 2015 has expired, yet there are no plans to have an election as the current executives have failed to nurture leadership qualities of their 14,500 constituents. This outcome is mainly due to their inability to mobilize resources to provide services to association members and created a power vacuum.

SECTION 5: CONCLUSIONS

5.1 Conclusions

Organization into associations has positively affected women's access to increased capacities overall (i.e., technical, leadership, advocacy), which resulted in increased engagement in fisheries governance and influence in fisheries management in the estuarine and small pelagic fisheries.

For both small-scale estuarine ecosystems and large-scale small pelagic fisheries, women's influence on fisheries management increased the most and was strongest when exercised from woman dominated platforms and associations with a focus on women's traditional areas of operation such as shellfish harvesting or fish processing. However, the estuarine ecosystems, which included women in management roles, demonstrated the use of annual closed seasons as early as 2017. This closed season may have contributed to the enabling conditions for the eventual adoption of the closed season in the artisanal small pelagic fishery for the first time in 2019.

Women's influence on fisheries management in male dominated arenas is increasing in Ghana but remains limited due primarily to traditional gender roles and cultural norms rather than for reasons of economic empowerment, especially in the small pelagic fishery.

VSLAs were an effective entry point in very remote communities in the Ankobra and Pra estuaries. Community entry and building trust was more difficult in these remote communities; in these situations, the VSLAs offered a way to engage the communities as well as to engage women in capacity development and fisheries management engagement. Still, it is important to emphasize that the majority of fishing communities along the coast are accessible rural villages and peri-urban areas; consequently, VSLAs did not play as critical of a role as an entry point in these areas.

Low literacy levels among women affects the delivery of interventions, especially those that rely on the leveraging of technology such as use of digital financial tools that give women greater control of their resources.

The three strategic approaches of the learning initiative (access to finance, women's empowerment, and sustainable fisheries management) improved fisheries management outcomes in the estuarine ecosystems of the Ankobra, Pra, and Densu. The women have become effective stewards of the fishery because they now understand that their role as gleaners means they are direct beneficiaries of the resource and the opportunities for their own empowerment. Their involvement in the governance of the resource has been invaluable, especially in the replanting and conservation of mangroves, even though they are constrained by the traditions and customs to speak up in the presence of men.

In the large-scale small pelagic fishery, women's businesses depend solely on a sustained supply of fish. By empowering them with leadership skills and including them in decision making institutions such as the Science and Technical Working Group, they have become an important constituency to drive change towards responsible fishing, even if not a powerful force in this arena at this time. This limited influence of women in small pelagic fisheries management is because inequalities are embedded in all the economic and social relationships among men and women in the fisheries sector.

This case study sought to investigate the hypothesis that:

1. Empowering women through access to finance and other capacity-building interventions **results in stronger fisheries management outcomes** than programs lacking these elements.
2. Engaging women as key stakeholders in fisheries management and improving access to financial tools provides **meaningful pathways for women's empowerment**.

The first hypothesis is true for Ghana's small-scale estuarine ecosystems where women are direct resource users and directly involved in the management of the resource. In the large-scale small pelagic fishery, women are processors of what is harvested by men and their traditionally defined roles mean they have no say in the gear or methods used for fishing, even though they sometimes finance fishing expeditions. Women in the large-scale marine fishery are more economically empowered than most women in Ghana, yet they are excluded from the management of the fishery. They lack the ability to engage institutions and so use the financial tools available to them to build resilience when there are disruptions in the fish supply.

The second hypothesis holds true in the Pra and Ankobra where women are direct harvesters of the resource and are involved in the governance of the fisheries, have access to VSLAs and micro loans and are able to make decisions for themselves and their household but not on decisions on the resource, except when their livelihoods are affected such as when mangroves are illegally harvested or waste is dumped in the river. But in those in the Densu are strongly exercising their decision-making power over the resource.

For the large-scale small pelagic fishery, the second hypothesis holds partially true to the extent that the engagement of women as stakeholders in fisheries management has led primarily to their empowerment as processors and traders in post-harvest improvements, improved access to financial tools, and financial empowerment but has not led to significant influence in fisheries management.

5.2 Recommendations

As already established, the contribution of women to the fisheries sector can no longer be ignored and efforts should be made to increase the capacities of women to advocate for sustainable fisheries management. To maximize the gains made in the last six years:

- Both men and women should be seen as equal partners in the promotion of sustainable fisheries management systems.
- More women should be included in leadership, instead of as constituents, in designing decision making systems.
- Program interventions should also have clearly defined objectives aimed at ensuring sustainable fisheries management, especially in the large-scale small pelagic fishery.
- Programs should invest more in increasing women's capacities in fisheries governance, especially in the large-scale small pelagic fisheries sector. Program interventions should provide equal support to men and women fishers instead of providing fishermen with subsidized outboard motors and nets while women typically receive a metal pan or a fish smoker, if anything.
- Women should be considered in the forefront of all fisheries governance as the decline or growth of the fisheries sector strongly impacts their livelihoods and household welfare.

REFERENCES

- Amador, D.E., and Nkrumah, K. (2016). Report on the 2016 Ghana Marine Canoe Frame Survey. Fisheries Scientific Survey Division, Fisheries Commission, Ministry of Fisheries and Aquaculture Development. 84 pp.
- Babalola, D.A., Bajimi, O., and Isitor, S.U. (2015). Economic potentials of fish marketing and women empowerment in Nigeria; *African Journal of Food Agriculture Nutrition & Development*. 14(2): 9922-9934. <https://www.ajol.info/index.php/ajfand/article/view/118292>
- 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. 121 pp. https://www.crc.uri.edu/download/GH2014_PGM187_CRC_FIN508.pdf
- FAO (2013). Implementing improved tenure governance in Fisheries. A Technical Guide to Support the Implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Food and Agriculture Organization, 83 pp. <http://www.fao.org/3/i3420e/i3420e.pdf>
- FAO, 2016. Excerpt from: “Promoting gender equality and women’s empowerment in fisheries and aquaculture”.
- 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. https://www.crc.uri.edu/download/GH2014_POL040_FoN_FIN508.pdf
- Golla AM, Malhotra A, Nanda P, Mehra R. (2011). Understanding and measuring women’s economic empowerment: definition, framework and indicators. Washington, DC: International Center for Research on Women. Available from <https://www.icrw.org/wp-content/uploads/2016/10/Understanding-measuring-womens-economic-empowerment.pdf>
- Hendricks, S. (2019). The role of Financial Inclusion in driving women’s economic empowerment, development in practice. *Development in Practice*. 29(8):1029-1038. <https://doi.org/10.1080/09614524.2019.1660308>
- Janha, F., Ashcroft, M., & Mensah, J. (2017). Participatory Rural Appraisal (PRA) of the Densu Estuary Oyster Harvesting, Bortianor/Tsokomey, Ga-South Municipal Assembly, Greater Accra Region, Ghana. TRY Oyster Women’s Association, Development Action Association and Hen Mpoano. Coastal Resources Center, University of Rhode Island. GH2014_ACT148_DAA. 35 pp. https://www.crc.uri.edu/download/Gh2014_ACT148_DAA_FIN508.pdf
- Lentisco, A. and Lee, R. (2015) A review of women’s access to fish in small-scale fisheries. FAO Fisheries and Aquaculture Circular No. 1098. Food and Agriculture Organization of the United Nations. 45 pp. <http://www.fao.org/3/a-i4884e.pdf>
- Ministry of Fisheries and Aquaculture Development, Fisheries Commission. (2018) DRAFT Oyster Fishery Community Based Management Plan for the Densu Delta, Ga South Municipal Assembly, Greater Accra, Ghana. 54 pp.

- Ministry of Fisheries and Aquaculture Development, Fisheries Commission. (2018). DRAFT Ankobra Estuary Community Based Fisheries Management Plan, Western Region, Ghana. 70 pp.
- Ministry of Fisheries and Aquaculture Development and the Fisheries Commission. (2018). DRAFT Pra Estuary Community-Based Fisheries Management Plan, Western Region, Ghana. 42 pp.
- Ministry of Fisheries and Aquaculture Development (2015). National Fisheries Management Plan, Government of Ghana. 48 pp.
- Ministry of Fisheries and Aquaculture Development (2019). POLICY FRAMEWORK ON FISHERIES CO-MANAGEMENT
https://www.crc.uri.edu/download/GH2014_POL061_MOFAD_CRC.pdf
- Njaya, F., Donda S. and Bene C. (2011). Analysis of power in fisheries Co-management: *Society and Natural Resources*. 25(7): 652-666. <https://www.tandfonline.com/doi/abs/10.1080/08941920.2011.627912>
- Oteng-Yeboah et al. (1999). Ghana Coastal Wetlands Management Project: Development of a Management Plan for the Densu Delta Ramsar Site.
- Pasani, C. L., Hara, M. and Chimato, S.K. (2001). An investigation of women's participation in fish value chain governance in Malawi, Department of Fisheries, University of Western Cape (A research paper).
- Torell, E., Owusu, A., and Okyere Nyarko, A. (2015). Ghana Fisheries Gender Analysis. 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_GEN001_CRC. 27 pp. https://www.crc.uri.edu/download/GEN001_SFMP_GenderAnalysisRpt_FINAL_508.pdf
- United Nations, 2015. The World's Women 2015: Trends and Statistics. New York: United Nations, Department of Economic and Social Affairs, Statistics Division. Sales No. E.15.XVII.8.
- Walker, (2001) An Estimation of Compliance of the Fisheries of Ghana with Article 7 (Fisheries Management) of the UN Code of Conduct for Responsible Fishing.

ANNEX 1. The Theory of Change – Results Chain

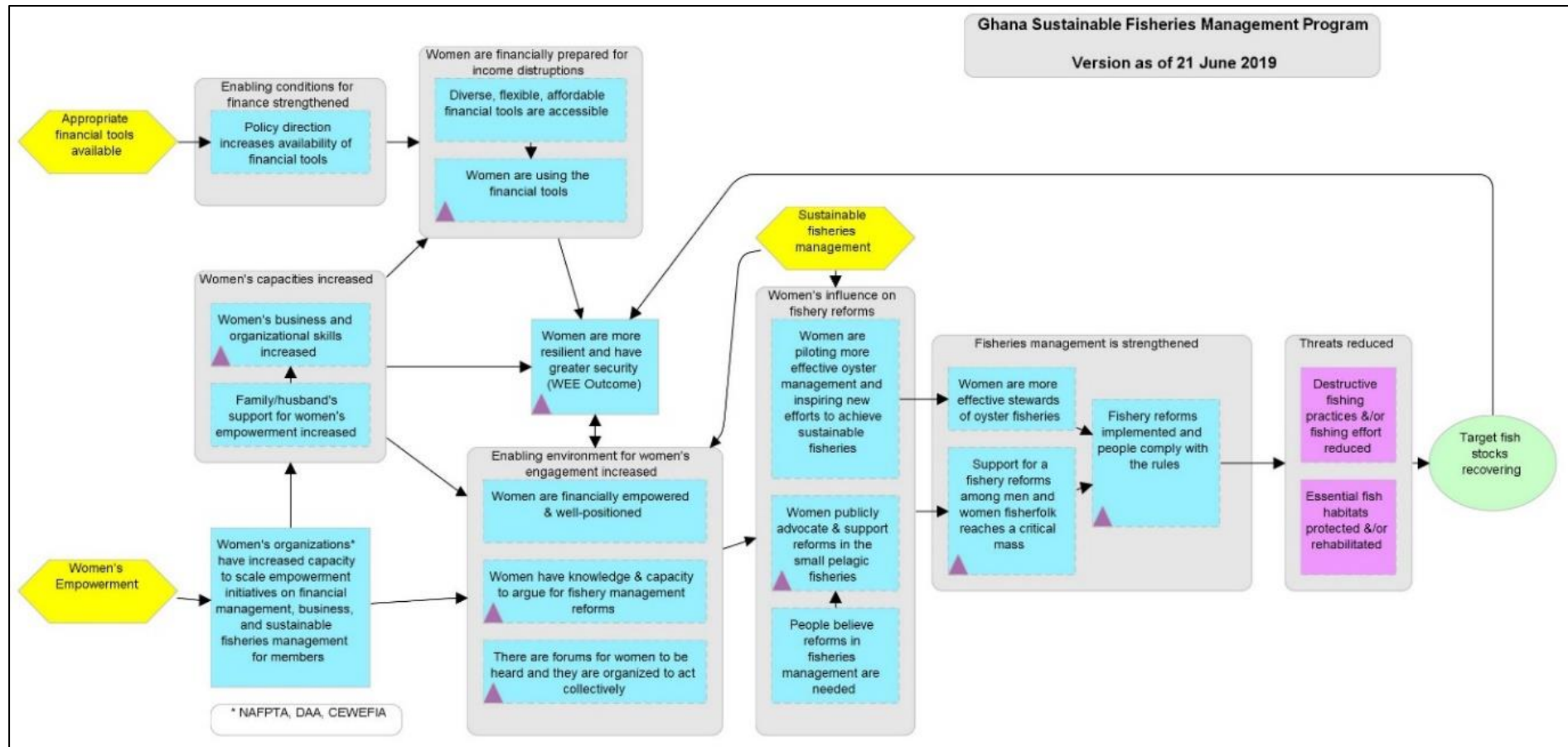


Figure 5 The Ghana WLI Results Chain

ANNEX 2. Notes on Methodology

The Ghana WLI Theory of Change Results Chain is presented in Annex 1. In Ghana, the WLI questions were addressed using a retrospective approach. For the estuarine sites, the focus was on cross-site comparisons because in one site (the Densu) the project worked with a majority women fishery (oysters), while in the other two (the Ankobra and Pra) the project worked with a mixed men and women fishery (finfish). The small pelagic fishery was considered as a whole because men's and women's roles are similar across all sites. Comparison of estuarine and small pelagic findings to highlight commonalities and differences with regard to the learning questions was considered throughout.

Sites were selected to capture cases where women participated in fisheries resource management activities, cases where women were provided access to financial tools and/or leadership and empowerment training, and cases where they were not.

This case study employed both primary and secondary data collection methods. Relevant literature on the subject of gender and sustainable fisheries management in the estuarine ecosystems and large-scale small pelagics was reviewed to understand the role of women and gender dynamics of the two fisheries systems. Qualitative data was also collected through seventeen key informant interviews in the target communities and key staff of the implementing partners. The key informant interviews involved selected individuals including the Chief fishermen and 'kokonhemaas' at the landing beaches and some members of the co-management committees at the estuarine sites and field staff of Hen Mpoano, Friends of the Nation, Development Action Association and the Central and Western Fishmongers Improvement Association.

The data collection was conducted over the period of January to February 2020.