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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP) Gender Needs Assessment Report



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OF OCEANOGRAPHY



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Cover photo: Women interchanging trays on the Chorkor smoker (Credit: SNV Ghana)

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ACRONYMS

CEWEFIA	Central and Western Region Fishmongers Improvement Association
CRC	Coastal Resources Center at the Graduate School of Oceanography, University of Rhode Island
DAA	Development Action Association
DAASGIFT	Daasgift Quality Foundation
HM	Hen Mpoano
GIZ	Gesellschaft für Internationale Zusammenarbeit
GNA	Gender Needs Assessment
GSO	Graduate School of Oceanography, University of Rhode Island
M&E	Monitoring and Evaluation
MFI	Microfinance Institutions
SFMP	Sustainable Fisheries Management Program
SNV	Netherlands Development Organization
SSG	SSG Advisors
URI	University of Rhode Island
USAID	United States Agency for International Development
VSLA	Village Savings and Loans Associations

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INTRODUCTION

In Ghana, fishing is largely a male-dominated economic activity, while women are mainly engaged in fish processing and trading. Children are also actively involved in fisheries, playing supportive roles as fishing crew members, fish processors and fish vendors. To date, interventions and policies have largely prioritized male dominated areas of production to the detriment of the broader fish value chain in which many women operate. As Deare (2004) reports, a neglect of the triple role women play in reproduction, income generation and community support have often left them disadvantaged in society. This skewed approach has prevented a more holistic address of the challenges facing the sector and culminated in huge losses in terms of production and income (FAO, 2013).

From the above-mentioned gaps as well as other persistent issues, such as overfishing, post-harvest losses, and child-labour amongst many others, it is apparent that men, women and children will each need a different and tailored approach to their needs to enable them realize their productive potential. However before this can be achieved, a careful and accurate diagnosis of the needs of all gender groups is important.

The SFMP Gender Needs Assessment (GNA) identifies and analyses the specific needs of the men, women, boys, and girls who are involved in fishing, fish processing, and fish trading activities along the central and western coast of Ghana, specifically in Apam, Winneba, Axim, and Elmina. The GNA is part of a suite of gender documents being prepared under the SFMP and complements the Gender Analysis Report, which provides an overview of the roles of children, women and men in the fisheries sector in the project pilot areas.

Scope of assessment

The needs of the fishing communities span a broad range of social and economic aspects, however, the focus of the project restricts this assessment to the needs of men and women engaged in fishing and fish processing as an economic activity. The interest of the assessment is on ‘practical needs,’ which, when fulfilled, will assist both men and women to better carry out their existing roles, ease drudgery, and address concerns of inequalities in living conditions (Deare, 2004).

The assessment is restricted to the pilot SFMP project areas: Apam, Winneba, Axim, and Elmina but can be taken as representative of the fisheries needs along the coastal areas of Ghana as conditions are similar from one community to another.

Objective of assessment

The objective of this assessment is to guide the development of the SFMP Gender Strategy. The results of the assessment will inform the proposition of actions and activities to be put in place and the implications of these on men and women engaged in the fisheries sector. In other words, the objective of this needs assessment is to assess the implications of current actions and the Project’s planned interventions for men and women engaged in fisheries.

Methodology

Both primary and secondary data were used to conduct this assessment. For primary data, the assessment team visited fish landing sites, fish processing areas and fish trading centres to

observe men, women and children carrying out their every-day activities in their working environment. Focus group discussions were held with 10 to 15 women fish-smokers and traders. Unusual situations also were identified, and one-on-one interviews were held with the individuals concerned, such as three men engaged in fish smoking and trading at Apam, an activity traditionally carried out by women. Interviews were held with key informants, such as the chief fishermen and *konkonhema* (the Queen Fishmonger).

Interview questions were open-ended and revolved around the routine activities of fishing and fish processing, equipment, and other resources used, the intensity of human labour applied, the use of children in activities, areas of support required, knowledge of alternative improved equipment, possibility and desire for change, types of assistance needed to remove drudgery and improve productivity. A copy of the guided questionnaire is attached in the appendix.

Secondary data was sourced from reports, books and the internet. Literature on fishing, fish processing and trading served as supportive data.

Identified areas for intervention

Fish smoking technologies

Drudgery

The current fish smoking technologies in use by women fish processors (and the few men) are the drum/barrel type and the Chorkor smoker (see photos below); the latter being an improved model introduced in previous decades. The design of the Chorkor smoker is such that the women have to interchange trays during the smoking process to ensure the even smoking of fish. The women complain of the drudgery associated with this process. It was observed that at least two women and sometimes girls carry these heavy trays. Fishermen or male relatives who may be around can assist in this process but this help is not always assured.



Barrel fish smoker (SNV, 2015)



Women interchanging trays on the Chorkor smoker (SNV, 2015)

Fuel inefficiency

The fish smokers also spend about 10% of their working capital on the purchase of fuelwood. The women interviewed complained about this expenditure on fuelwood though they had no basis for comparison. They did not realise how much saving could be made if they switched to improved technologies until their attention was drawn to it. The Chorkor smoker, which some women already use, is an improvement over the traditional barrel stove. It is 10% more efficient in terms of fuelwood savings and gives a more uniformly smoked product (US Congress, Office of Technology Assessment, 1988). This is, however, still considered inefficient as compared to more improved options like the Morrison stove, as being promoted by SNV, which offers a 40% saving in fuelwood as compared to the Chorkor.

Smoke

Another identified area for intervention with the fish smoking technologies used by the women has to do with smoke emitted from the barrel and Chorkor smokers. The absence of a chimney in this type of stove results in high levels of particulates (smoke) in the working environment, with women and girls seen rubbing their eyes and often with reddening or tears. Some were squinting and even coughing. The women complained that after some years of smoking fish, their vision became impaired. Exposure to smoke is known to cause diseases including cataracts, loss of vision, and even lung cancer (Bruce, Rogelio, & Rachel, 2000) which the fish smokers are at an increased risk of suffering from.



Women exposed to excessive smoke from a Chorkor smoker (SNV, 2015)

Excessive heat

The current fish smoking technologies used by the women also emit a lot of heat. The fire chamber is too wide and allows the escape of heat during smoking. The external walls also emit a lot of heat. Exposure to excessive heat from cooking also leads to various health risks. These include headaches, dizziness, fatigue and more fatal conditions such as heat stroke (Canadian Centre for Occupational Health and Safety, 2014). To reduce their exposure to the excessive heat associated with the current fish smoking technologies, some women have devised protective clothing for themselves. They wear heavy long dresses with long sleeves and trousers underneath.

Low level of engagement of women in fisheries management

Along the coast of Ghana, women who engage in fisheries are not involved in its management. They act as individuals and do not have the power to determine who, where and how fishing or fish processing should be done. The power resides with the chief fishermen, who have been mandated by virtue of their position to see to the enforcement of the ban on illegal methods of fishing. They decide who goes to sea, to whom fish is sold, and how local management should be done. Migrant fishermen even pay tolls to them. The chief fisherman sometimes operates with a council (local branch of the Ghana National Canoe Fishermen Council), headed by the chief fisherman and in charge of management.

The *konkohemaa* is the head of the fish processors and traders. She controls the price at which fresh fish is bought from the fishermen. Any woman who flouts this pays a penalty to her. In recent times, however, this role has been downgraded. In the pilot areas, women fish processors and traders do not have any organized group at the local level. At the national level, it was not until March 2015 that the National Fish Processors and Traders Association (NAFPTA) was formed with the assistance of the Fisheries Commission.

Beside the fact that the women are not organised in groups, their low financial status also does not give them management control. Generally, women have a louder voice and are able

to determine choices when they are in a better financial standing. This is evidenced by poverty reduction and empowerment successes that come due to microfinance programmes in many communities around the world (Mayoux, 2006). This is no different in the fisheries sector. Discussions with the women revealed that through boat ownership and funding of fishing trips, women have dictated fishing methods used by fishermen. The more assets they own, the more involved they are in taking decisions as to where to fish and which fishing methods to use. Very few of them however have been able to invest in fishing. The few who have, have investments too small to gain any effective control. Women in control or in management positions in fisheries can fight against illegal fishing. The women are against the illegal methods used for fishing and complain of the reduced fish stock and small fish caught by the fishermen. While they recognise fish caught with illegal methods by simple inspection, as individuals with little or no authority, they have no other option than to purchase the fish.

Discussions held with the women fish processors in Axim, Apam, Winneba, and Elmina revealed that women who own fishing boats or have other investments in fishing are able to exert some influence in fisheries decisions. The more assets she owns, the greater is her control. It is on this basis that the women expressed their desire to invest in fisheries. They requested financial assistance first and foremost to invest in fishing and then in their own fish processing or trading businesses.

Male fish processors and traders are not affected in the same way as their female counterparts. They have little or no investment in fishing but have greater means to purchase fish for processing. One of the few male fish processors and traders interviewed explained that he did not have much control in fisheries management. The distribution of fish, trays and other resources is biased towards the women, as this is their traditional role. He however had the resources to meet the needs of his business and was not affected by the control and management of the community resources.

In fisheries, the fishermen have taken a lead role in management and have better organised associations than the women fish smokers. This gives them more control and they tend to neglect the needs of the women in the decisions they take. Even when seeking financial assistance, their aim is to invest solely in their fishing business and not in the women's fish processing and trading business. Since the men are already active in fisheries management, they do not require as much assistance as the women do.

Lastly, some researchers argue that due to the minimal child and health care, education, and entertainment opportunities in many fishing communities, women have to be more engaged in coordinating the day-to-day activities than they would be if such facilities existed (De Silva, 2011).

Marketing of fish

Inadequate facilities at market centres

Women sell their processed fish in markets in other towns and cities like Accra, Kumasi and Swedru. Most often, the fish processor ends up selling her own fish. They travel outside their communities to these markets for a number of days and stay with relatives in the host markets or sleep in make-shift structures, often in undesirable conditions. Some of the markets have no facilities and wares are displayed in the open, unprotected from the weather.

Access to other markets

The marketing of processed fish is dominated by women with very few men engaged in fish trading on the Ghanaian market. In foreign markets such as Canada, the United States of America, and the European Union, however, the men are the major exporters/sellers with very few women involved. The income from fish sold on the local market is obviously lower than from the foreign markets. During the bumper (peak) season especially, income is low and some women even incur losses. Those who are able to store fish for sale in the lean season are able to get good prices for their products.

During the focus group discussions, the women indicated that they would be glad for assistance to export their fish. They are, however, unable to meet the strict food standard obligations such as low levels of Polycyclic Aromatic Hydrocarbon (PAH) or low biological contamination level, especially for exports to the European Union. Other foreign markets like Canada and the United States of America do not have very strict conditions but the women are still unable to export because they have no links to those markets. The few women who access these markets operate as sole entities and are unable to produce enough to meet the few requests they receive from these markets.

Storage of fresh fish

During the bumper season (August to November), the women work around the clock to smoke fish due to the absence or limited access to cold storage facilities. They take little rest during this period because they run the risk of losing fresh fish if it is not processed immediately. One of the direct consequences of this is that girls end up taking care of their younger siblings as the mothers have little time to spare. Some women own household freezers that they use to store their fish and that of other women at a fee. The fishing communities do not have a cold storage facilities that both fishermen and fish processors could benefit from.

In addition, the fishermen preserve fish at sea by purchasing privately produced ice blocks or smaller ice blocks made in household freezers. However, these are not adequate to support the volume of fish caught, particularly in the bumper season.

Training for fishermen and fish processors

Knowledge on fishing and fish processing is passed from one generation to the next and skills are developed over the years of working. The women fish processors make use of local materials in their work and are rarely introduced to improved methods of processing. It was observed that fresh fish is handled in an unhygienic manner, with some going bad, making it unsuitable for smoking. This fish is then processed into fermented fish or used for other low income generating activity such as animal feed. In many parts of Africa, post-harvest losses can be as much as 30% of total fish catch (Bene & Heck, 2005). According to FAO (2010), loss in fish attributed to quality accounts for over 35% of the total loss. Poor handling of the fish due to lack of training is one major cause of such losses. Both fishermen and the fish processors lack access to the fish handling training that would reduce their losses and increase income.

The women processors and traders in the fishing communities lack business management skills and are unable to realise an increased profit margin through a lack of knowledge in

basic book keeping. This also gives them very little chance of securing loans from financial institutions.

Fishermen, especially their leaders, have a lack of understanding of child labour issues and other illegal matters related to fisheries. The fish processors and traders also give out their children, ignorant of the fact that they are subjected to harsh working conditions. Non-Governmental Institutions like CEWEFIA and Challenging Heights have been working to help these children but further assistance is required.

Access to credit

In discussions, the women traders and processors expressed the need for financial assistance to enable them to invest in fishing and to purchase fish, especially in the lean season. The women are engaged in fish processing and trading as their major or only income generating activity. Even in the lean season when there is little available fish they hardly engage in other income generating activities. They rather purchase fish from cold stores at the Tema Harbour, where the fish is more expensive, to smoke. Most women are unable to purchase enough and therefore do not generate sufficient income to support themselves and their children. They often have to compete for fish and end up offering sex for fish exchanges when they are unable to purchase with cash from the fishermen.

One of the few men fish processors and traders interviewed was doing good business with more than one processing site in different towns along the coast. He moved from one community to the other and from one market to the other to carry out his business. The fishermen were concerned about the frequent breaking down of their outboard motors. They wish they could be less dependent on the women and own their fishing resources.

OPTIONS FOR IMPROVEMENT

With the needs of women in fisheries identified, it is evident that measures to empower them and improve their positions must be enacted expediently. Empowerment has been looked at from a variety of angles, but the United Nations Population Information Network takes a holistic view and places it in these five components: improving “women's sense of self-worth;

- Improving their right to have and to determine choices
- Improving their right to have access to opportunities and resources
- Improving their right to have the power to control their own lives, both within and outside the home
- Improving their ability to influence the direction of social change to create a more just social and economic order, nationally and internationally.”

The following measures have been proposed to meet the needs of women in fisheries while empowering them to harness their potential as influential stakeholders in fisheries conservation.

Improved fish processing technology

Fish processors require improved technologies for drying and smoking their fish. The technologies should be at least 40% efficient in terms of fuelwood savings. This would save

the women money that would otherwise have been used to purchase fuelwood. The technology should also smoke or dry the fish faster thereby free up time for the women. The improved stoves must be heat resistant on the outer part and emit little smoke, which should be channelled away from the working area. The technology should require little or no maintenance, allow an even smoking of the fish, and reduce significantly or eliminate the drudgery in the use of the current Chorkor or barrel smoker. Technologies such as solar dryers could be introduced to dry the fish significantly before smoking to further reduce smoking time. The technology could also be used to process dried fish efficiently.

Involvement of women in fisheries management

Women should be assisted to organise themselves at the community level. 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 konkohemaa should not be ignored in the process. Rather, efforts should be aimed at strengthening the weak leadership and management system already in place. 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. Since they can identify fish caught illegally, they can unite to refuse the purchase of such fish, forcing the fishermen to desist from such practices.

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 konkohemaa 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.

Marketing of processed fish

The women can be assisted to market their fish in other markets such as urban supermarkets and the regional and international market. With improved processing technologies and the right training on producing healthy fish, a segregation of the local market for healthy processed fish is possible. A market for healthy and hygienic fish should be created for these women where they can get a higher price for fish processed the healthy way. As associations, they can seek the assistance of institutions like the Food and Drugs Authority and the Ghana Standards Authority to obtain the necessary government support for their business. The women associations can also get easier access to foreign markets and even work together to eventually sell on markets with strict conditions like the European Union.

Fish traders should be assisted to organise themselves at the community level as part of the association. This will help them secure improved market conditions and services and help them engage in the broader fisheries dialogue. Another opportunity to increase the income of the women is to offer them training in negotiation techniques to help them get good money for their wares. Again, as a unified body, the associations could benefit from economies of scale, which would lead to increased productivity.

Ice making plants and cold storage facilities

Ice and cold storage facilities for preserving fresh fish will greatly reduce post-harvest loss and store fish for the lean season. This will ensure a more reliable source of fresh fish for

processing in the lean season. Storage facilities for fresh fish particularly in the bumper season will reduce drudgery and the long hours (even around the clock) the women work on processing the large volumes of fish caught. This will give them time to rest and time for their family. The burden on girls babysitting younger siblings would also be reduced and they would have more time for studies.

Some successful measures include quotas for women in membership and decision-making positions in fishery organizations; gender-sensitive training in management and leadership skills and; and awareness-raising among men and women of gender-equity issues and associated labour rights.

Training

Fish processors require training in fish handling in order to help them realise better prices for their fish, even on the local market. For export they need training on improved processes which would pave the way to the regional and European markets. The Ghana Standards Authority, the national approved certified body on processed fish of the European Union, could assist the women in establishing compliant facilities suitable for processing fish for export. The processors also require training in business development and book keeping. This should be simple and conducted in the local languages, and should cover fish storage, packaging and marketing.

The entire fishing community particularly the chief fisherman and his committee members, the *konkohemaa* and the fish processors and trader require further education/refresher training on child labour/trafficking and illegal fishing methods. Fishermen and fish processors should be made aware of the outcome and well-being of the children they give out to work in other communities. Likewise, they should be sensitized on the burden they place on boys who go out to sea and the girls who spend time taking care of younger children rather than spending the time studying. Other child labour issues, such as the legal age for children to work and child protection, should be reiterated.

Alternative livelihoods

With the depletion in fish stock, it is expedient to support and encourage alternative economic activities to the traditional fishing and fish processing. Interest in fisheries is very high, and fishermen and fish processors are generally not interested in other sectors. Fisheries related economic activities like aquaculture could be introduced and promoted to the fishing communities. Both fishermen and fish processors should be assisted and supported to engage in aquaculture in the coastal waters and fish ponds. This will reduce the pressure on the depleting fish stock. Women in particular should be encouraged to own their own source of fresh fish for processing. This will give them more control over resources, provide a more reliable source of fresh fish and improve their livelihood.

Access to credit

Credit facilities can be provided for the fish processors and fish traders to enable them expand their business and secure some greater control in fisheries. Women would not have to be put in a position of trading sex for fish if they have the financial means to purchase fish. With improved bookkeeping practices, women stand a better chance of securing loans from microfinance institutions (MFIs). Other financial engineering support such as the Village

Savings and Loans Associations (VSLAs) could be extended to women's associations to encourage savings and offer financial support to members. The VSLAs gives both the fishermen and women fish processors and traders stronger standing in negotiating with MFIs for better loan terms and conditions.

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APPENDIX

Questionnaire for Focus Group Discussions and Key Informants

1. Is fishing/fish smoking your main economic activity?
2. Are you engaged in other economic activities to gain additional income?
3. In the lean season, do you continue to depend on fisheries for income?
4. Do you engage in other income generating activities during the lean season?
5. Is the price at which you purchase the fish from the fisherman lower because you have invested in his business?
6. In the bumper season, do the men struggle for customers?
7. Are their women investors still obliged to buy everything from the fishermen?
8. Are there clinics/health centres nearby?
9. What are some of the common health problems you suffer from because of your work?
10. What are the health issues with fish smoking?
11. Are the men/women able to access health care? Do they have the financial means?
12. Will you be interested in switching to an improved technology which makes your work easier, even at a fee?
13. Is storing fresh fish particularly during the bumper season a problem for you?
14. Do your children support you in your work?
15. Do you engage other people's children in work?

16. Basic education is 'free' but are you able to afford the books and other levies to put all your children through school?