

Women in Artisanal Fishing and their Socio-Economic Well-Being in Asembo Bay, Siaya County, Kenya

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ABSTRACT

This study assessed the role of women in artisanal fishing and socio-economic well-being in Asembo Bay, Siaya County, Kenya. The study employed a qualitative descriptive research design and a sample of 100 women was chosen to form the unit of analysis. The study used a Purposive Sampling approach to select participants. Data was collected using key informant interviews, focus group discussions, in-depth interviews, and observation guides. Based on the objective, this study used a thematic data analysis method where data was presented thematically. The findings revealed that 30% of the participants were involved in pre-harvesting activities, including fixing fishing nets, leasing boats, securing loans, and cleaning boats. The study showed that 60% of women engaged in post-harvest operations, which included gathering remaining fish, sun-drying them, cleaning, smoking, frying, and marketing. The findings indicated that 5% were involved in fishing activities and other occupations like farming, hospitality, fish preservation refrigeration services, loans, and boat rentals. About 5% of the participants partake in diverse entrepreneurial endeavors at the beach, including the sale of tomatoes, potatoes, porridge, ugali, cooked beans, garments, and kitchenware. The respondents expressed the view that engaging in artisanal fishing enhances the well-being of women, thereby eliminating their dependence on begging. The research proposed the following: the implementation of fisheries funds; the involvement of NGOs, local government, and CBOs in the daily activities in Asembo Bay; and the improvement of the working environment in Asembo Bay.

Keywords: Women socio-economic wellbeing, Artisanal fishing, socioeconomic, well-being, pre-harvesting, post-harvesting, traditional fishing techniques.

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Introduction

According to Reshma and Shripathi (2024), artisanal fishing is considered the primary driver of growth in the agriculture sector, leading to enhanced socio-economic welfare for both men and women, particularly those residing in fishing communities. Women have a crucial role in artisanal fishing, essential for enhancing their income. Panford (2017) observed that women in Thailand engage in activities such as owning boats, repairing fishing nets, and preparing boats. She asserts that women who possess boats have higher earnings compared to those who do not own boats, as they may rent them out to other men who compensate them in return. Research conducted in Mexico revealed that women secure direct employment in pre-harvest activities. Specifically, women engage in tasks such as fixing fishing equipment, procuring bait and preparing for fishing expeditions.

In a study conducted by Nyiawung et al. (2021) regarding the worldwide involvement of women in small-scale capture fisheries, it was discovered that women capture around 3 million tons yearly, notably, the biggest number of fish caught by women in Asia. Women in Africa were discovered to capture 260,000 tons of fish annually. The survey additionally discovered that women contribute up to 12% of the total landed value of artisanal catches worldwide. Harper's study reveals substantial advancements in women's participation in fishing, which has had a positive impact on reducing hunger, food surplus, and nutrition.

Chambon et al. (2023) investigates women's participation in small-scale fisheries management, and discovered that affluent women in these communities possess boats and allocate funds towards acquiring fishing equipment and recruiting capable male crew members. The study revealed that women possess boats and hire crew members to get fish. Furthermore, Tidd et al., (2022) observe that women provide financial support for the procurement of fishing equipment, such as boat construction, maintenance, and the mending of fishing nets, which are utilized by males for the purpose of fishing.

Women have a significant role in the fish processing industry. Women's involvement in post-harvest activities in Nigeria is on the rise. According to Tonye and Francis (2014), women between

the ages of 18-35 are more engaged in post-catch activities compared to those above the age of 50. Active women were found to possess a higher level of education compared to older women who are perceived to have little understanding. Women between the ages of 20 and 40, who possess secondary and tertiary education, have the necessary knowledge and abilities for post-harvest tasks. This places them at a higher level compared to older individuals. Oanta (2019) found that young women engaged in artisanal fishing experience higher levels of empowerment in comparison to elder women. This is due to their implementation of proactive strategies aimed at ensuring food security, generating revenue, and mitigating societal vulnerability.

According to USAID's 2018 action research, improving women's economic well-being and socioeconomic circumstances in Senegal through empowering them in the artisanal processing of fishery products is essential. This empowerment additionally facilitates the advancement of women's leadership. The USAID study highlights the need to educate female processors about efficient processing techniques and protocols in addition to best practices for preserving the cleanliness and quality of fisheries products.

The Women's Economic Empowerment Strategy 2020-2025 in Kenya places a high priority on the fisheries industry as a means of providing economic advantages to women (Ministry of Public Service and Gender, 2020). Women constitute 70% of the workforce in the fisheries sector. The primary motivation for entering the artisanal fishery business is the desire for socio-economic well-being. Jang and Kim, (2016) observed that women engage in artisanal fishing to augment food availability and alleviating hunger. The literature observed that women actively engage in post-harvest to achieve economic value. Additionally, the survey revealed that women possess boats and nets, engage in fish farming, and contribute to further studies.

Objective of The Study

The objective of the study was to assess the role of women and their socio-economic well-being in artisanal fishing in Asembo Bay, Siaya County, Kenya.

Research Methodology

This study utilized a qualitative approach, where a qualitative descriptive research design was employed. The study used qualitative data collection methods. A sample of 100 women was chosen to form the unit of analysis. The study used a Purposive Sampling approach to select participants. Data was collected using key informant interviews, focus group discussions, in-depth interviews, and observation guides. Based on the objective, this study used a thematic data analysis method where data was presented thematically.

Findings of the Study

Demographic profile of the participants

Results of the survey indicate that women between the ages of 30 and 50 made up the majority of the respondents, or 60% of the total, while women between the ages of 18 and 29 made up 30% of the total. Ultimately, the group of women who were 51 years old comprised 10% of the overall participants. The figure below displays the age distribution of the participants.

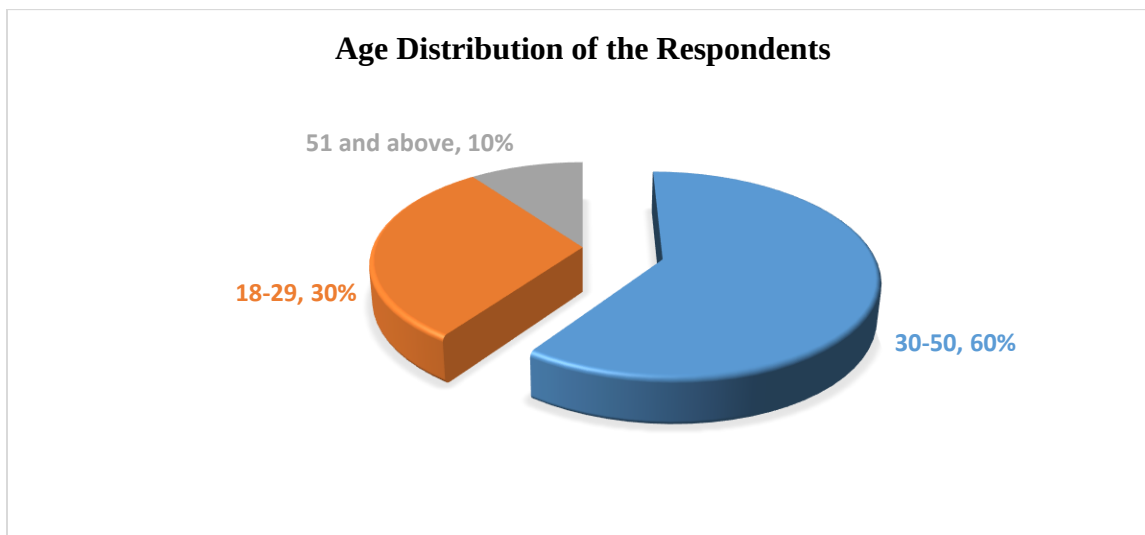


Figure 4.1: Age distribution of participants

Findings

The role of women and their socio-economic well-being in artisanal fishing in Asembo Bay, Siaya County, Kenya.

The study aimed to assess the role of women and their socio-economic well-being in Artisanal fishing in Asembo Bay, Siaya County, Kenya. The findings revealed that 30% of the participants were involved in pre-harvesting activities, including fixing fishing nets, leasing boats, securing loans, and cleaning boats. Conversely, 60% of women engage in post-harvest operations, which include gathering remaining fish, sun-drying them, cleaning, smoking, frying, marketing, and selling. Five percent of the individuals were engaged in fishing activities in addition to other occupations like farming, hospitality, fish preservation refrigeration services, loans, and boat rentals. About 5% of the participants partake in diverse entrepreneurial endeavors at the beach, including the sale of tomatoes, potatoes, porridge, ugali, cooked beans, garments, and kitchenware. In contrast to Tonye and Francis (2014) study on women's actual catch, the results of this study indicate that women did not participate in the actual catch in Asembo Bay.

The results indicate that 90% of the participants believed that fishing activities greatly benefit them, while 10% expressed that they have failed. The respondents expressed the view that engaging in artisanal fishing enhances the welfare of women, thereby eliminating their dependence on begging. The findings indicate that 90% of women engaged in artisanal fishing are self-employed and do not rely on or work for others at the beach. One respondent for an in-depth interview disclosed her role and how she has gained from it by saying,

I have been operating a seafood stall specializing in fried fish at the beach for five years. I initiated the establishment of the business after passing of my spouse due to the manifestation of rejection within my household. I utilized the funds I received upon the demise of my husband to initiate that enterprise. Currently, my eldest child is in her last year of studies at Maseno University, while my youngest child is preparing to take her form four exams this year. I have observed the advantages of engaging in the fish industry. Indeed, it can be highly profitable, but only if one exercises caution and is willing to assume risks. I have acquired two motorized vessels, enabling me to generate substantial income daily. All those who believed that the demise of my spouse would devastate my existence have vanished completely. As a highly regarded individual in this community, I frequently provide support to other women who are facing

challenges in establishing their lives by the seaside. There are opportunities present at Asembo Bay. Women have ample opportunities to make significant contributions in this field, as evidenced by the abundance of available prospects (Respondent number 1).

The study conducted by Oanta (2019) reveals that wealthy women in fisheries are those who own boats and according to Capability approach theory, women with access to resources can live a worthy life. The finding of the study revealed that 5% of the respondents own boats and they are the most influential in decision- making at the beach. One key informant who doubled as a woman group leader said,

At any shoreline along Lake Victoria, the predominant aspiration of women is to possess a fishing boat. As a leader, I have engaged with women who own fishing vessels, and it is a fact that they generate substantial income. I am acquainted with a woman who underwent a divorce two years ago. She embarked on the business of selling omena, subsequently obtaining a loan that she utilized to acquire a single boat. Today, the woman has completed the construction of her two-bedroom house within her property. As for me, I am eagerly anticipating acquiring a boat now that I have thoroughly conducted my research and am fully cognizant of all the requirements involved in boat ownership. There are women here who are earning substantial amounts of money due to their competence, determination, and focus, ensuring they do not experience poverty. There is a common misconception among many individuals that women engaged in the fish business are the most impoverished in rural communities. However, this belief is incorrect. Women in fishing communities exert additional effort to ensure their children receive an education, as they are typically less educated themselves. They aspire for their children to surpass their educational achievements. Additionally, these women ensure that there is an adequate food supply in their households and strive to construct suitable shelter for their families (Female Key Informant)

The findings show that women engaged in various business activities such as selling clothes, porridge, onions, utensils, and tomatoes at the beach earned the lowest income due to their reliance on the benevolence of beachgoers. The researcher noted that certain individuals engage in street vending and offer their merchandise at discounted prices. One of the respondents for in-depth interview provided the following statement,

I attempted to engage in the fish industry, but I experienced a lack of success. I contemplated initiating a beachside enterprise and ultimately decided to specialize in the sale of porridge to beachgoers. Initially, the business thrived;

however, it eventually experienced a decline in customer footfall, resulting in reduced porridge sales. I incurred financial losses, resulting in returning home with a meager meal of porridge. I opted to stroll along the shoreline with my bowl of porridge, and the sales remained sluggish. I opted to decrease the cost of a cup from ksh 30 to ksh 20, however, the sales remained unsatisfactory. I transited into selling tomatoes and onions, despite the low demand. Although I have limited alternatives, I am compelled to persist with this endeavor. In contrast to the women selling fish, my earnings are modest, but that is the amount I bring home (Respondent number 2).

The results indicate that 95% of the participants hold a strong belief that engaging in an alternative occupation in addition to fishing activity is highly beneficial when the latter fails or loses value. Conversely, 5% of respondents acknowledge the challenge of achieving multiple objectives simultaneously, suggesting that their advanced age makes it physically and mentally exhausting to engage in more than two activities. According to Akintola (2022), younger women at the fishing bays are more empowered than older women due to their proactive nature and ability to multitask. The following statement reflects the observation made by one of the discussants.

In my opinion, it is advantageous to integrate this business with another endeavor. The population of individuals employed at Asembo Beach is on the rise, while the availability of job opportunities is diminishing. Consequently, I believe we must take action to augment our income alongside our current employment. As an illustration, I own a grocery store located at Nyilima market. On certain occasions, the unavailability of fish, omena, and ochong'a occurred due to the government's cessation of beach activities. This led to significant hardships for many individuals, emphasizing the importance of having alternative options. Asembo Bay possesses highly fertile soil. It would be beneficial for us to engage in farming as an alternative source of income when beach activities are not profitable for us (Female Discussant).

The results indicate that individuals engaged in additional activities such as crop cultivation, poultry farming, cattle rearing, and owning shops experience financial stability, higher income, and improved well-being in comparison to those solely involved in fishing. During an in-depth interview, one respondent expressed the following statement,

It is economically misguided to depend solely on a single source of income. Expanding the range of income sources is advantageous. I am a vendor of cured fish at Kamito. Additionally, I engage in pig farming, poultry rearing, and groundnut cultivation at my residence. By selling a single male pig to the

butcher, I receive approximately Ksh 15000, which adequately covers my monthly expenses. Each bird I sell from my poultry farm generates an income of Ksh 700. Within my residence, I possess approximately 200 kilograms of meticulously categorized groundnuts, which I vend to the Catholic sisters at Lwak Catholic Church. Asembo is a commendable location, albeit plagued by the predicament of inadequate potable water. Utilizing the profits generated from pig farming, I invested in the construction of a borehole, which now enables me to sell water to the neighboring residences. I collaborated with my spouse, who is a skilled mechanic in Kisumu, to enclose our residence with a fence. Additionally, we have a total of two children. Our eldest son is currently employed by the county government, while our youngest child is preparing to take their final exams this year. I have greatly profited from the process of economic diversification. Occasionally, the decline in the well-being of fish can be attributed to customers lacking financial resources, making it impractical to compel them to make purchases. Upon recognizing a decline in sales, I promptly shift my attention toward my agricultural endeavors. Within the local community, I am renowned as "mama shamba" (Respondent number 3).

According to the study, 80% of the participants had a positive perspective on the things they did in Asembo Bay. The data illustrate that women are actively working to alleviate poverty and hunger, educate their children, live a meaningful life, and attain long-term stability. Tidd et al., (2022) found that women participate in artisanal fishing to increase food production and reduce poverty. Their research supports these conclusions. Moreover, the study unveiled that women own boats and nets, participate in fish farming, and actively contribute to research. During the focus group discussion, one discussant disclosed the following details,

I am in Asembo Bay with a purpose and do not intend to squander any time. I am here to acquire financial resources and enhancing both my own life and the lives of my family members. Every morning, I, like any other government employee, arise to provide for our families. I am optimistic that shortly I will achieve success. Currently, I allocate my funds into three distinct groups for saving purposes, without having to rely on soliciting money from others. Occasionally, it is advantageous to conduct oneself as if one possesses nothing, yet remains self-aware of their true identity. My boats are thriving, and I will soon be launching a restaurant. Impoverishment is a detrimental condition, thus I sincerely hope that no individual experiences it. The economic situation in Kenya is currently unfavorable, however, must not passively wait for assistance. Instead, we must take proactive measures to improve our future. (Female Discussant).

The results indicate that 20% of the participants expressed a negative outlook on their future at Asembo Bay, attributing their lack of progress to unfavorable market conditions and a lack of financial assistance. One participant in the in-depth interview mentioned the following.

I am currently in my third year of operating a fried fish business in Asembo Bay. Regrettably, I have observed no discernible progress, prompting me to conclude that this will be my ultimate year engaging in this enterprise. Oftentimes, the market exhibits irregularity. Occasionally, purchasers acquire my fish on credit but fail to make timely payments, resulting in financial losses for me. I am contemplating initiating a mitumba enterprise in Ramba market to assess its viability (Respondent number 3).

However, the findings of the study show that the experts, who were also important sources of information, think that women are progressively taking charge of artisanal fishing in Asembo Bay. At the beach, the researcher found that there were more women than men in each group. Women make up 50% of the artisanal fishing industry, which makes up 90% of the workforce overall, according to a 2020 World Bank research. According to one key informant, women are gradually gaining control over the beaches as a result of their extensive involvement in beach-related activities.

Women have recognized that artisanal fishing presents a profitable business opportunity, leaving them with no alternative job prospects other than participating in fishing activities. Consequently, the male population is gradually decreasing while the female population continues to grow. Twenty-eight of the thirty-eight boats at the shore are owned by females. Moreover, a significant proportion of the dining establishments found at any beach are under the ownership of women. Additionally, the food items being cooked in these establishments are obtained from farms that are also owned by women. By actively engaging in fishing activities and visiting lakes to capture fish, women are currently transforming the fishing industry. Their participation is adding substantial value to the fishing business. A notable asset of this group is their cohesion and strict compliance with the law (male key informant).

Furthermore, the researcher made observations at the beach and in the villages in order to confirm the answers that the respondents had given. The study observed that women exhibit greater engagement in post-harvest activities and farming. Moreover, most of the homes the researcher visited had crops like maize, groundnuts, and beans being sun-dried in addition to livestock including pigs, chickens, cows, and goats. Beginning at 8 a.m., the researcher noted that most

women were working at the beach, cleaning fish, drying dagaa and ochong'a, and managing restaurants.

Discussion of Findings

The study aimed to assess the role of women in Artisanal fishing and how their involvement impacts their socio-economic well-being in Asembo Bay, Siaya County, Kenya. The findings revealed that 30% of the respondents were involved in pre-harvesting activities, including fixing fishing nets, leasing boats, securing loans, and cleaning boats. The study showed that 60% of women engaged in post-harvest operations, which included gathering remaining fish, sun-drying them, cleaning, smoking, frying, and marketing. The findings indicated that 5% engaged in fishing activities in addition to other occupations like farming, hospitality, fish preservation refrigeration services, loans, and boat rentals. About 5% of the participants partake in diverse entrepreneurial endeavors at the beach, including the sale of tomatoes, potatoes, porridge, ugali, cooked beans, garments, and kitchenware. The respondents expressed the view that engaging in artisanal fishing enhances the well-being of women, thereby eliminating their dependence on begging.

Conclusions and Recommendations

The study sought to understand the involvement of women in Artisanal fishing and their women's socio-economic well-being in Asembo Bay. The study concluded that women were majorly in post-harvest activities. The findings also noted that women with adequate finances and resources were able to acquire boats and engines and they were able to employ fishermen to go and fish. The findings also reveal that the majority of women were involved in farming as a way of supplementing their income from fishery-related activities. The study found out that the benefits of women's role in artisanal fishing were invested in paying school fees, building houses, paying *chamas*, and re-investing. Finally, the study recommended the creation of county fisheries funds to enable women with loans and other needs. The study recommended the involvement of the CBOs, NGOs, and the government in the day-to-day activities at the beach. Finally, the study recommended the improvement of the working conditions at the beach to enhance development.

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