

Women in the Blue Economy: Employing Networking to Drive Sustainability Reinvestment in Small-Scale Fisheries in Homa-Bay County, Kenya

Patrick Asango Okanga

Department of Economics, Laikipia University, Kenya

Abstract

Can networking contribute to reinvestment and drive sustainability in small-scale fisheries by women? Given the increasing demand for quality livelihood, food and nutritional security, poverty alleviation, and increasing fish enterprise, stability among small-scale fishers has become an increasingly relevant question. However, given the rapidly growing number of women players in the sector in the recent past, it becomes significant that reinvestment in the industry would steer the sector towards improved sustainability as opposed to fuelling unsustainable working conditions, overexploitation, and discrimination of women fishers in the business. Drawing from social capital theory and applying a mixed method approach, a sample size of 330 small-scale women fishers comprised of fisher folks and traders was scientifically obtained and analysed. The study also involved focus group discussions and key informant interviews as sources of data and the basis of analysis. Networking does not significantly influence reinvestment in small-scale fisheries by women was the null hypothesis put to test. Findings were anchored on parametric and thematic analyses of the influence of bridging networking on sustaining reinvestment of small-scale fisheries business proceeds to stabilize the enterprise. It was established that bridging networking had a statistically significant influence on reinvestment in the sector; networking explained 16.4% ($R^2=.164$) variability in reinvestment, the model significance was reported by $F(1,328) 64.507$, $p<0.05$, and $\beta=.340$, $p<0.05$ which implied that a unit increase in networking results into .340 units change in reinvestment. Therefore, defining their space in the blue growth trajectory in the Lake-Victoria region of Homa-bay County in Kenya is scientifically established. It concluded that bonding networking could enhance sustainability reinvestment in small-scale fisheries by women in the blue space growth. On this dimension, sustainability performance in the country's blue space should consider bridging networking as a factor that brings on board all categories of stakeholders, which incorporates small-scale women fishers.

Keywords: Blue Economy, networking, reinvestment, sustainability, small-scale fisheries

Introduction

Reinvestment in small-scale fisheries is increasingly regarded as a road map for achieving food security, alleviating poverty, and increasing economic growth worldwide (Ameyaw et al., 2020; Kalikoski et al., 2019). In inland waters and coastal countries, fish catch and consumption account for up to 70 percent of protein intake and is an indispensable source of vitamins, fats, and minerals (Siles et al., 2019). At the global level, more than 40 million people are employed as fishers, with an estimated 90 percent operating on a small scale (Food and Agriculture Organization of the United Nations, 2015; Penca et al., 2021). Even though aspects of small-scale fisheries vary according to the size of their operations, most nations have their

operational definitions for small and large-scale designations. Notwithstanding, a universally accepted boundary does not exist between them (Kelleher & Mills, 2012).

However, broad definitions of small-scale fisheries rely on a narrow range of quantitative parameters, like gear type, operational area, and vessel size and power (Alonso & Siar, 2018; Scholtens, 2016). The small-scale fishing industry is active and diverse, with different features depending on the region. It is typically deeply ingrained in the customs and values of the local communities. In addition to directly supplying food for their households, small-scale fisherwomen and fish workers are self-employed (Stacey et al., 2019; World Fish Centre, 2020).

Given that the small-scale fisheries sector provides an essential route for growth and livelihood, enhancing sustainability in the sector is a concern. Sustainability would enable stable working fisheries and, therefore, meet the nutritional needs of the expanding population while staying within environmental bounds (Jaabi & Esemu, 2014; Kabeer, 2017). To date, different approaches have been geared towards reinvesting and reaching sustainability in the sector. To encourage reinvestment in the fisheries, enhanced coordination and formal agreements between stakeholders along the supply chain have been used to solve the sustainability concerns within a fishery (Barr et al., 2019).

Retailers and mid-chain actors fulfil sustainability commitments and maintain the security of fish supply to keep the earning proceeds reinvested in the small-scale fisheries sector by expanding the stock quantity, acquiring different fish species, and possibly reaching more market outlets. This is in addition to adopting more sustainable fishing practices (Bartholomew & Consultant, 2014). Furthermore, Roscher et al. (2022) opined that investing in diverse livelihood sources, such as in value addition, creates less pressure on fisheries by minimizing losses by preserving the catch, thus sustaining the income from the catch. The focus is that sustaining reinvestment and expanding investments in the sector remains a concern. The aim is probably to ensure that adequacy in the livelihood supply needs meets the ever-increasing demand prospects. On the other hand, an elaborate approach to transform the small-scale fisheries with the ‘darlings’ of the blue growth narrative, the large corporate entities, has partially been a good deal for perceived expanded livelihood supply (Said & MacMillan, 2020). However, displacing small-scale women fishers, underpinning the fact that the networking dimension of social capital factor as a driver of reinvestment in small-scale fisheries, has received limited attention from the academic community discourse.

In a study conducted by Obregón et al. (2020) in south eastern Australia, it was established that social networks in fisheries research were weak, and few researchers use the networks for information sharing to sustain their research. Ineffective networking could have been perceived as a key factor hindering sustainability and growth in the small-scale fisheries sector. Despite this, social networking has been highly rated as fundamental to effective communication flows among the stakeholders in the sector. Networking has remained a key dimension that influences fish catch patterns for large and small-sized fish species, thus making networking a natural resource management instrument, a finding from Jamaica (Alexander et al. (2020). On this note, it can be alluded that networking could be a driving factor for women's reinvestment in small-scale fisheries.

The role of networking in supporting marketing has further been pinned to small-scale fisheries. A study conducted by Moreau and Garaway (2021) in East African inland waters among small-scale women fishers established that the network supports domestic marketing and enhances food and income supply equity among the fishers’ community. Consequently, establishing the role of networking in driving reinvestment remains an area of triangulation.

While analysing the aspects of collective action and the role of conflict in Kenyan fisheries co-management, Murunga et al. (2021) established the role of networking as an instrument of conflict resolution among small-scale fishers. On this account, stakeholder networking is

geared towards conflict resolution rather than stabilizing the sector through reinvesting in its stability; a similar sentiment was resonated by Onyango et al. (2020) while analysing livelihoods among fishers in Homa-bay County. He established that prevailing poor and discriminating networks among fishers negatively affect gender access to fisheries and fish resources. This could hinder sustainability reinvestments, especially in the nodes of small-scale fisheries value chains under women's control. This research uses the mixed research approach to navigate whether and to what bridging networking could drive reinvestment sustainability among the small-scale fisheries by women in the blue economy area of Homa-bay County, Kenya.

State of Fisheries and Women Fishers in Kenya

Small-scale fisheries have traditionally taken a marginal space in Kenya's national economic and policy dialogue. This could be attributed to their low contribution to national income compared to other food production sectors, such as agriculture and livestock (Kimani et al., 2018). However, the fisheries sector contributes to economic growth and offers livelihoods to many Kenyans. On this account, it needs to be managed with a comprehensive policy that guides and influences sustainable development and utilizes fisheries resources for the benefit of the present and future generations of the Kenyan people (GOK, 2007).

Kenya's fishing sector contributes about 0.5 percent of the country's GDP, about 2 percent of the country's GDP, and about 2 percent of the national export earnings (Kenya National Bureau of Statistics, 2019). The industry employs an estimated 1.2 million people directly and indirectly, with 70 percent being women along the small-scale fisheries value chain. About 96 percent of the total fish production in Kenya is derived from inland freshwaters, with Lake Victoria, the largest inland freshwater, contributing about 80 percent. This constitutes 1 percent of the world's captured fish and 8 percent of the world's inland harvest fish. However, only 6 percent of the lake is in Kenya. Fish trade in Kenya is largely small-scale and revolves around women small-scale fishers (KMFRI, 2018). They are engaged in pre- and post-harvesting activities, including fish product transportation to the markets, usually with some value addition such as drying, smoking, and deep-frying.

The challenges facing Kenya's small-scale fishery sector are not as small as the name suggests but are enormous, ranging from environmental alteration and inconsistency, aggressive species, overfishing, declining stocks, and lack of sustainability in the enterprise. Furthermore, increasing weak enforcement management measures, encroachment of fishers into fish breeding areas, inadequate infrastructure for fish processing, quality, and safety assurance, as well as climate change together with postharvest loss have caused an impediment to the business sustainability (Anderson et al., 2015; G.O.K, 2008; KMFRI, 2018).

These challenges negatively affect women whose involvement in the sector cuts across the supply chain. Management interventions developed over the years include introducing co-management structures through the Beach Management Units (BMUs) and the Community Conservation Areas (CCAs). In these structures, women have not been given an equal hearing, and their opinions have not been listened to, even though they are stakeholders in the industry. They comprise about 19 percent in the pre-harvesting stage, 15 percent in harvesting, and more than 60 percent in the post-harvesting activities.

Theoretical Framework

The theory of social capital, associated with the works of Bourdieu (2002), Coleman (1988), Putnam (1994), and Woolcock (1988), was applied to explain fishers' networking and reinvestment. The concept expresses the sociological essence of communal energy, focusing on how reaching to one another offers a solution to a problem that requires a common approach

and voluntary collective action. Forms of social capital are general moral resources of the community, and they can be divided into trust, social norms, and social networking.

The theory contends that such forms of social relationships, such as networking relationships, like networking, are resources that yield reproductive benefits to groups or individuals in a society or an organization (Häuberer, 2011). The scholars argue that social groups exist as nodes of convergence and interactions, which results in social ties, linking groups or individuals who share similar beliefs and values (Matthews & Besemer, 2015). These networks result in an exchange of resources, such as information flows, and behaviour patterns, such as collective action and Trust.

In 1998, Woolcock expanded the theory by building on its three components: bonding, bridging, and linking social capital. Bonding social capital results in solidarity within or between groups with common characteristics such as family members. Bridging social capital in the study is anchored. It links people across groups, races, classes, or religious affiliations and, as such, creates collective action within the group that is perceived to have a common aim or objective. Linking social capital conversely focuses on the networks of the relationship between people, groups, or institutions with formal authority. It has the potential to embrace the relationship between individuals or groups through sharing a common interest with the help of passing information to different components (Evans & Weninger, 2014).

Modern institutions like business enterprises may build on such narratives for prosperity-related actions. Social capital theory embraces dimensions of social capital such as group networking, group solidarity, group collective action, and group information sharing. This study, therefore, uses social capital theory to advance the argument that small-scale fisheries ought to be aware that exploitation bridging networking resources could lead to sustainability reinvestment for small-scale fisheries in the blue economic space.

Networking in Small-Scale Fisheries

The social capital concept has remained relevant and is linked to socioeconomic connectedness and social relationships between people and their businesses. As a result, it has facilitated productive outcomes over time. Furthermore, it cooperates with stocks of networks and social trust that people can draw upon to address sustainability challenges. Its creation has been embraced as a solution for diverse socio-economic and environmental problems facing individual businesses and enterprises.

According to Tajeddini et al. (2020), networking in social capital entails the relationships among people who live and work in a particular society. This enables society to function properly. Regarding small-scale businesses such as fishing, networking comes in through the business members, buyers, and the activities they engage in to pull resources together. Entrepreneurial networking offers a platform to figure out and shape venture connectivity, detect, develop, and act upon socio-economic dynamics requiring the attention of an enterprise and its sustainability (Abbas et al., 2019). Networking as a social capital dimension is an important determinant of enterprise sustainability. Furthermore, networking builds ties with enterprise stakeholders, ensuring longevity in the livelihood and effective working of the value chain, which links producers, supplies, and customers along the value chain.

Networking demonstrates frequent interactions, linking fish entrepreneurs of similar interests. It enables frequent participation and consultations by fish stakeholders to disseminate fish management knowledge among fishers and across fish enterprises. Network as a dimension of social capital can potentially build stronger relationships among small-scale fishers. This creates partnerships within the sector and advances fishing knowledge essential to maximizing fish resource utilization (Dias et al., 2023). In Bolivia, it was concluded that such networking shapes the fishers' perception, resulting in a new culture of support among the fishers.

In this context, networking impacts new fishing knowledge and the exploitation of fish resources. However, the impact of networking on sustainable small-scale fisheries concerning specific gender remains an area of study. This study will bridge this gap by focusing on how social capital drives the sustainability of small-scale fisheries among women. Networking among the fishing community cannot be ignored when managing small-scale fisheries effectively. Through networking, solutions are communicated to the stakeholders promptly. Fishers' challenges can easily be shared, and solutions are promptly communicated to the stakeholders. Nunan et al. (2018) established that networking among the fishers is instrumental in managing and coordinating activities along the fish value chain. However, achieving fisheries management through networking is different from achieving sustainability. This study will narrow this gap by focusing on networking and sustainability among small-scale fisheries owned by women.

Fish marketing by small-scale fishers remains a challenging venture in developing economies. On this front, the role of networking in determining market outlet choices cannot be ignored (Malit et al., 2021). In most cases, social networking among the fishers would define the diverse market direction, magnitude, certainty, and durability. Even though social networks have remained a driver in identifying fish market outlets, their influence on realising sustainable small-scale fisheries has not been given attention. This study will focus on leveraging networking as a dimension of social capital for the sustainability of women-owned small-scale fisheries.

Methodological Approach

The study area was Homa Bay County, comprising four sub-counties located along the shores of Lake Victoria, near the southwestern border of Kenya. The study used a mixed-methods research design, which enabled the researcher to complement qualitative approaches with quantitative ones to allow for a more complete interrogation of the study variables.

The study targeted a population of 2,385 women fishers (fisher folk and traders) who are spread along Lake Victoria in the county. The sample size was calculated using Yamane's formula to get a sample number from our population, in which $N = 2,385$ with $\pm 5\%$ precision. Assuming a 95 percent confidence level and $p = 0.05$, we get the sample size of 342. The researcher obtained all required permits from the National Commission for Science, Technology, and Innovation (NACOSTI) and the Directorate of Education, Homa-bay County. Quantitative data was collected using semi-structured questionnaires, while qualitative data was collected using focus group discussions and key informant interviews. Quantitative Data was analysed using Statistical Packages for Social Sciences version 26, and qualitative data was analysed thematically using Nvivo version 14.

Reinvestment of Small-scale Fishers Proceeds

Reinvestment is a measure of sustainability (dependent variable) in the small-scale women fishers' enterprise. The study assessed the practice of women fishers (whose duties are both fishing and trading) to reinvest the profit they earned from their small-scale fish business. The findings, presented in Table 1, will be a pointer to the sustainability level or otherwise.

Table 1: Profitability Reinvestment of Proceeds (%), N=330 (100)

Statement	SD	D	UD	A	SA	MN	STD-DIV
I use part of my income from the fish business to increase additional stock	57 (17.3)	58 (17.6)	51 (15.5)	47 (14.2)	117 (35.5)	3.33	1.52
My fish business had employed additional worker	65 (19.7)	86 (26.1)	61 (18.5)	83 (25.2)	35 (10.6)	2.80	1.30
I have been able to pay more to my employee	81 (24.5)	32 (9.7)	13 (3.9)	56 (17.0)	148 (44.8)	3.47	1.67
My business has enabled me to buy fish processing equipment	67 (20.3)	164 (49.7)	49 (14.8)	10 (3.1)	40 (12.1)	2.36	1.19
I use the profit from the fish business to open up other business	77 (23.3)	3 (0.9)	13 (3.9)	85 (25.8)	152 (46.1)	3.70	1.59
I can reach many market outlets because of good returns from my business	79 (23.9)	32 (9.7)	13 (3.9)	56 (17.0)	150 (45.5)	3.50	1.67
Composite/weighted Mean						3.19	1.49

Source: Research Data (2023)

Table 1 shows results in terms of percentages on questions relating to profitability reinvestment by the respondents. Of the 330 respondents, 46.1 percent used profit generated from the fish business to diversify to other businesses like transport of goods and people and small-scale farming among others. Further analysis of the investment diversification practices by women as a result of the profit proceeds earned from fisheries shows that the respondents were in strong agreement ($M = 3.70$, $SD = 1.59$), which implies that they used profits from the fish business to open up other businesses. This is although diversification of proceeds from the fish business may contribute to the weakening of fish enterprises, therefore compromising profitability reinvestment of proceeds.

It was found that 45.5 percent of the respondents could access some market outlets due to profit earnings from their business. Further analysis gave a mean (M) = 3.50 and standard deviation $SD = 1.67$, which indicates a strong agreement. This suggests that profitable returns from their fish businesses support logistics to different market outlets and enhance business networking. Furthermore, this implies that small-scale fish enterprises struggle to have a market share of sales by reinvesting their profit proceeds. 44.8 per cent strongly agreed to have increased payment to their employees. The study investigated whether the respondents' capability to pay more money to their employees had increased. The result ($M = 3.47$, $SD = 1.67$) strongly agrees that they used part of their profit income to increase employees' income.

This is an indication of employee retention strategy and human resource investment. This could result in fish enterprise sustainability, expansion, and additional profit proceeds reinvestment.

Furthermore, an additional 35.5 percent of the respondents used part of their profit income to increase their fish stock. The study also sought the small-scale fish business capacity to use earned profit to increase additional fish stock. The findings ($M = 3.33$, $SD = 1.52$) agreed that part of their profit goes for stock addition. The results indicate that the entrepreneurs observe business principles of keeping the business alive by restocking the fish products, thus

reinvesting part of the proceeds to keep the enterprise stock. This view was stated by a focus group discussion participant who stated that:

...I started the fish business with small capital from the sales of my farm produce. The business was doing so well in terms of profit, besides sales, I was able to get what to eat and my family. I started with four tins of small 'daga' fish, then extended to seven tins as it was giving me a good return. I then later extended to tilapia and finally to Nile patch. Whatever profit I got, I kept something for marry-go-round, food for my household, and part of my profit and capital for more stock... (FGD, Ongukwa Beach).

The study results on whether the entrepreneurs could spend part of their profit income to acquire fish processing equipment and employ more workforce show that out of 330 respondents, 49.7 percent and 26.1 percent disagreed, respectively. Further analysis shows that additional employment of workers ($M=2.80$, $SD=1.30$) and ability to buy fish processing equipment ($M=2.36$, $SD=1.19$) show lower consensus. These findings suggest that although most respondents agreed with profitability reinvestment levels, reinvesting profit generated from the fish business, buying the fish processing equipment, and employing additional workforce were not their key focus business areas. These could limit the act of profitability reinvestment of the proceeds.

Additional analysis from the table shows a weighted mean of 3.19 and a standard deviation of 1.49. An overall mean of 3.19 implies that the majority (64%) of the respondents agree to the fact that they reinvest part of their profit proceeds. Even though obtaining fish processing equipment and employing more workforce among small-scale women fishers is important for effective small-scale enterprise operations, this is still a challenge on the ability to acquire processing equipment on account of cost and the size of the business, even though it may be a desirable undertaking by small-scale women fishers. This could be due to the magnitude of fluctuating demand and supply of fish stock. Processing machines and increasing employee payments could result in higher business costs, which every rational entrepreneur would always avoid. A Key Informant observed this view:

...for a long time, we have suffered and still suffer because we cannot process our fish and even we cannot afford further processing equipment. Even though our members are willing to get such equipment, their money ability cannot allow them. Some have even opted out of business because of such challenges... (KII, Ongayo BMU, Sindo)

This finding concurs with Cooke et al.'s (2021) work. Reinvesting profit proceeds is important if a small-scale fish enterprise wants to sustain its operations. This will address the challenges of fisheries business fluctuations due to the fish stock's unstable supply and demand. Reinvestment strengthens the business and protects it from negative shocks that may derail its sustainable operations.

Analytical Results

Network and Sustainable Reinvestment of Small-scale Fisheries

The study's objective was to examine the influence of networking on women's sustainability reinvestment of small-scale fisheries. The literature and empirical evidence suggested that networking would be associated with the sustainability reinvestment of women's fisheries. On the sustainability reinvestment by small-scale fisheries by women, the outcome variable had six measure items from where a composite index for sustainable reinvestment in small-scale

fisheries was computed. Networking was the predictor variable in the study objective. Being a latent variable, it was measured using six items, where a composite index for fishers' networking was computed and used in testing the hypothesis. The following hypothesis was tested using a simple linear regression model to analyse the objective. For qualitative data, thematic analysis was applied using Nvivo version 14:

H₀₁: The Network does not significantly drive sustainable reinvestment in small-scale fisheries by women.

$$RNT = \beta_0 + \beta_1 RN + \epsilon$$

Where:

RNT= Sustainable Reinvestment of small-scale fisheries representing a dependent variable.

β_0 = Regression constant,

β_1 =Regression Coefficient of Fisher networking,

NT = Composite index of fishers Networking representing the independent variable.

ϵ = Error term.

The results of the test are presented in Table 2.

Table 2: Regression Results of Leveraging Network on Sustainable Reinvestment of small-scale Fisheries

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405 ^a	.164	.162	.44676
a. Predictors: (Constant), Networking				

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.875	1	12.875	64.507	.000 ^b
	Residual	65.468	328	.200		
	Total	78.343	329			
a. Dependent Variable: Reinvestment						
b. Predictors: (Constant), Networking						

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.550	.190		13.404	.000
	Networking	.340	.042	.405	8.032	.000
a. Dependent Variable: Reinvestment						

The hypothesis tested whether fishers' networking does not significantly influence the sustainability of reinvestment of small-scale fisheries by women. Table 2 summarizes the

findings. The dependent variable (sustainability reinvestment) was regressed on the predicting variable (fishers networking) to test the null hypothesis H_{01} . Networking significantly predicted sustainability reinvestment, $F(1,328) = 64.507$, $p=0.000<0.05$, which indicated that networking had a significant influence on sustainability ($\beta = 0.340$, $t = 13.404$, $p=0.000<0.05$). The β value of 0.342 implies that one unit increase in the fishers' network results in a .342 unit increase in sustainability performance. Moreover, $R^2 = .164$ implies that networking explains 16.4 percent of the variance in sustainability, while the remaining 83.6 percent could be accounted for by other factors apart from networking.

Based on the above findings, it can be concluded that there was a significant positive relationship between fishers' network and women's sustainability reinvestment of fisheries. This led to the rejection of the null hypothesis. Using the statistical findings, the regression equation can be substituted as follows:

$$RNT = \beta_0 + \beta_1 NT$$

$$SUS = 2.432 + 0.342 NT$$

Discussion of the Study Findings

The discussions of the study findings are anchored on how both predictors and outcome variables manifested their relationships in this study. The regression analysis was applied to establish the outcome. Finally, an overview of the study objective, hypothesis, interpretation, and conclusion was presented. The discussion provides detailed study outcomes in line with the research objective and conceptualized hypothesis.

In addition, the discussion resonated with the theoretical, empirical, and qualitative narratives from the focus group and key informants. These discussions, therefore, interpret and position the results within the discourse of women fishers networking and sustainability reinvestment of small-scale fisheries by women. The discourse was centred on the study results and organized along the research objective. SPSS version 26 and Nvivo 14 were used in data analysis.

Networking and Sustainability Reinvestment of Small-Scale Fisheries

The study's objective aimed to examine the influence of networking on the sustainability reinvestment of small-scale Fisheries by women. This objective corresponds with the hypothesis stated as H_{01} : *Network does not significantly influence the sustainability reinvestment of small-scale fisheries by women*. Network, a latent variable, was conceptualized based on six items; group participation, increased business connections, network size, frequency of meetings, business growth, and increase in income, as proposed by Anderson et al. (2007) and Anderson and Miller (2003). On the other hand, the sustainability reinvestment in small-scale fisheries was measured by indicators extracted from sustainable development indicators (Bakos et al., 2020; Tan et al., 2015). The research findings, as seen in Table 2, revealed a positive and significant relationship ($r = .405$) between network and sustainability reinvestment performance.

Furthermore, the predictor variable explains 16.4 percent of the variability in the outcome factor ($R^2 = 0.164$). In addition, the study revealed that the network positively and significantly affected sustainability ($\beta = 0.340$, $p<0.05$). Thus, the network and its attributes are significant in determining the effectiveness of enterprise sustainability reinvestment performance. This observation was explicitly captured in different focus group discussions where participants remarked:

...One cannot manage this fish business as an individual, without linking up with one another. There are many things to consider every day you are off to the lake to get

fish for sale. You must know what type of fish has landed, and in which landing space, the ongoing gate price, and what other landing beaches look like. Further, one must connect to the market. Therefore, connections or networking is what makes our fish business sustainable by using our sales return to get additional stock.... (FGD Ngodhe Beach- Suba North).

Networking takes place to establish the availability of the catches, the dominant species of the day, prevailing market prices, and the sales situation. This view was shared by a key informant as captured:

...as a BMU leader, I take up the initiative by networking with other beaches to advise the fishers on the supply trend of the day. Such networking is important for business reliability and consistency in enterprise efficiency and income generation. Indeed, such networking is important for sustainability in the fisheries by women... (KI Nyagwethe beach-Suba-south).

The findings agree with the themes of social capital theory (Putnam, 1993). Besides, it is postulated in the theory that forms of social capital, such as networking, are general moral resources of enterprises. Häuberer and Jerabek (2011) and Coleman (1988) concluded that networking can yield productive benefits to organizations and sustain their operations. Further, the findings agree with other research, including that of Mankgele and Fatoki (2020), who established that networking positively impacts the sustainable performance of small-scale and medium enterprises in South Africa.

The results also conform to the findings of Nthuni (2014), who found that business networks positively influence the sustainability and growth of small-scale and medium enterprises in Kenya. Small-scale fishers need to be more conversant with network traits such as meeting frequencies and expanding network size and put them into practice for the longevity of their fisheries. Furthermore, these results are in tandem with the findings of Tilley et al. (2021), who established that network as a component of social capital has a positive and significant influence on rural women enterprises, including fisheries.

An effective network builds innovation and self-esteem, resulting in a stronger and more sustainable enterprise. Similarly, Cruickshank and Rolland (2006) concluded that networking saves fisheries enterprises and sustains their efficiency and fish product deliveries. The findings of this study, therefore, confirm the conclusion made by previous studies that networking enables small-scale enterprises to become more sustainable in their operations.

Conclusions

The main reason for conducting this research was to leverage social capital for the sustainability of small-scale fisheries by women. The null hypothesis formulated to test the influence of bridging networking on reinvestment sustainability performance was statistically significant. The relationship between the dependent and independent variables, as given in the objectives, was found to be statistically significant, implying that bridging networking variables are key factors for consideration in this sector. The results from the descriptive analysis on focused group discussions, and key informant interviews with women fishers revealed that women-owned small-scale fisheries embraced the significance of social capital for their enterprise performance. It confirmed that networks positively and significantly influence sustainability, $r = 0.551$, $R^2 = 0.303$, $F = 142.768$, $p = <0.05$, and $\beta = 0.342$, $p < 0.05$. Key informants' interviews and the Focused Group Discussions affirmed similar sentiments. This study concluded that networking positively and significantly affected sustainability. This is likely because in small-scale fisheries, market dynamics dispersed locations, trade in

different fish species, and fish waste recycling require enhanced networking initiatives and practices in fisheries if their business longevity is to be attained.

The fisheries sector plays an important role in the global economy. In Kenya, the sector provides food, employment, and income to a large population, earning substantial income from the domestic market and foreign exchange. These earnings will likely increase if the under-exploited areas, such as small-scale fisheries, are tapped and supported for sustainability. Considering that the government of Kenya keeps on reviewing fisheries policy through fisheries acts, this study has implications for government implementation agencies and the fishing community as a whole. The study results revealed a statistically significant relationship between fishers' networking and small-scale fish enterprise sustainability. This implies that if fishers establish business networks linking the fishing and landing points and networking among, for example, the fish business community, the possibility of sustaining fish enterprises could be realized. Policymakers should ensure that fisheries officers adopt and enforce networking strategies in the sector to achieve sustainable activities such as profit reinvestment and fish waste recycling along the fish value chain and realize value, equity in supply, and a just price of fish.

The study has brought to the fore various issues and sentiments that require further navigation and investigation. On this account, some of the implications and limitations of this study open up recommendations for further studies. While this study successfully established the leveraging social capital to the sustainability of small-scale fisheries by women, it equally presented enormous prospects to direct future research. The analysis from this study established that fishers' networking influences reinvestment in the sector. This may lead to improved and sustained livelihood among the small-scale informal women fishers whose works cut across fisher folks and traders. Further research can also investigate other variables that could moderate this relationship. In addition, further research may also take the initiative to navigate the possibility of the presence of mediating variables such as training and credit facilities in establishing the relationship between social capital and sustainability in small-scale fisheries by women.

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