

Role and Form of Women's Participation in the Fish Value Chain in Small-Scale Farming in Lusaka Province

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[DOI: https://dx.doi.org/10.47772/IJRISS.2024.801142](https://dx.doi.org/10.47772/IJRISS.2024.801142)

Received: 28 December 2023; Accepted: 13 January 2024; Published: 15 February 2024

ABSTRACT

This study evaluated the nature of women's participation in the fish value chain. Recognizing the indispensable contributions of women in agriculture and fisheries, this research was aimed at illuminating the specific ways in which women engage in the fish value chain and what policies support their aquacultural activities. Qualitative approaches including interviews and focus group discussions were employed. Data was gathered from key informants and women actively involved in small-scale fish farming operations in seven districts of Lusaka Province, with a focused exploration of their roles in the fish value chain and any recommendations they had to enable smooth operations. Document review of policies guiding aquaculture was also done using a gender lens. The findings underscored the multifaceted involvement of women across various stages of the fish value chain, encompassing pond management, harvesting, processing and marketing. Despite their substantial contributions, existing policies lack explicit and targeted measures to address the unique challenges faced by women and to address gender disparities within the aquaculture industry. This research has highlighted the multifaceted role and form of women's participation in the fish value chain within the context of small-scale fish farming in Lusaka Province, Zambia. The findings underscore the significant contribution of women to various aspects of the fish value chain, including trading and processing, showcasing their adaptability through a blend of traditional and modern methods.

Keywords: Fish Value Chain, Women's Participation, Aquaculture, Gender, Policy, Zambia

INTRODUCTION

Aquaculture can be defined as the breeding, growing, and harvesting of fish and other aquatic plants, also known as farming in water. The significance of aquaculture in global fisheries markets rose due to increasing demand for fish, driven by a growing global population and rising incomes (World Bank, 2021). This heightened importance was accentuated by the fact that capture fisheries were reaching full exploitation (FAO, 2020). The globalization of aquaculture was primarily facilitated through foreign direct investments, with producers expanding their reach within the sector and venturing into various aspects of the value chain, including feed processing (Anderson, 2016). The trend was also influenced by the outsourcing of production procedures (Asche et al., 2018), reflecting a drive for increased profits, larger operations, and control over essential inputs like feed.

While the globalization of aquaculture is a prevalent trend, it is essential to recognize that not all aquaculture follows an industrial model. Many developing countries, including Zambia, exhibit small-scale and widespread aquaculture practices that may pose unique challenges. Small-scale producers might require

support in the form of access to finance, capacity building, and technology transfer to meet export market standards (FAO, 2020). In this dynamic landscape, this study aimed to understand the role and forms of women's participation in the fish value chain within small-scale farming in Lusaka Province, Zambia. Despite the growing acknowledgment of women's importance in the agricultural sector, their contributions in the fish value chain have often been overlooked. The research, therefore, sought to provide a localized understanding of the role and form of women's participation in the fish value chain, information we believe will contribute to informing policy and in the design of intervention strategies tailored to the specific needs of women in the local communities.

DEFINITION OF KEY CONCEPTS

Value chain is the full range of activities required to bring a product or service from conception, through production, transformation and marketing to delivery to final consumers and final disposal after use (Kapinsky and Morris, 2000). It encompasses the flow of products, knowledge and information, finance, payments and social capital needed to organize different activities. In the context of aquaculture, this concerns activities needed to produce, process, trade and consume different fish and/or fish products.

Small-scale farmers are categorised by marginalisation in terms of information, accessibility, capital, resources, technology and assets (Hazell et al, 2007:1). The word small may refer to the amount of land being used, and the number of workers and/or capital invested (Gouldthorpe and Goodwin, 2013:55).

Women participation is understood as a process of ongoing change through which women expand their aspirations, strengthen their voice, exercise their choice and have greater influence and control over their lives and futures. (Mc Dougall et al., 2021).

Women's empowerment is a multifaceted concept that encompasses the enhancement of women's social, economic, political, and educational status, leading to increased autonomy, agency, and participation in decision-making processes. Further, women empowerment is the ability of women to exercise full control over their actions, and to participate actively in social, economic, and political domains, making decisions that affect their lives and the lives of others (UNDP, 1995).

THEORETICAL FRAMEWORK

The Women in Development (WID) Theory, introduced by Ann Oakley in 1974, challenged the traditional trickle-down assumptions of development theories by emphasizing the active involvement of women in all facets of value chain growth and development. This approach rejected the notion that economic progress automatically benefits everyone, highlighting the importance of women as active participants rather than passive recipients of development benefits. The WID paradigm recognized the historical exclusion of women and advocated for practical empowerment measures, such as creating business opportunities, expanding employment access, improving financial inclusion, and enhancing educational opportunities for women.

Moser's (1993) five policy approaches within the WID framework provided a strategy for implementing gender-inclusive development in developing countries. These approaches included the Welfare Approach, which focused on providing social safety nets to enable women to better care for their households, contributing to the overall well-being of society. The Equity Approach addressed the triple burden women face by acknowledging their roles in the household, productive sector, and community, proposing policy interventions to reduce disparities and enhance women's self-reliance. The Anti-poverty Approach recognized the feminization of poverty and advocated for targeted interventions to uplift women economically, while the Efficiency and Empowerment Approaches emphasized practical assistance,

capacity development, and the transformation of gender relations to actively involve women in all productive sectors.

The chosen WID theory was deemed suitable for the study due to its focused examination of the unique barriers women encounter in the fisheries value chain. The theory considered social, cultural, economic, and political factors shaping women's participation and emphasized active involvement for realizing benefits.

METHODOLOGY OF THE STUDY

The data for this paper were collected from both secondary and primary sources, including published books, articles, and policy documents. Interview guides and focus group discussions were conducted with eighty (80) small-scale women fish farmers and twenty (20) key informants. The study was conducted in seven districts, including Chilanga, Chirundu, Chongwe, Kafue, Luangwa, Lusaka, and Rufunsa in Lusaka province, with a total of eighty (80) registered women engaged in small-scale fish farming. The list of women from the Department of Fisheries participating in small-scale fish farming was used to select participants sampled from seven districts of Lusaka Province. A convenient sample that was believed, based on prior information, to provide the data needed was used. The selection of the sample was solely determined by identifying the most characteristic, representative, or typical attributes of the population.

Additionally, information was sourced from twenty (20) key informants, including the Department of Fisheries (4), Provincial Fisheries Officer, District Fisheries Officers (one representing each district), Ministry of Local Government and Rural Development, Ministry of Land and Natural Resources; Zambia National Farmers Union, Aquaculture Development Association of Zambia, Zambia Alliance of Women, Citizen Economic Empowerment Commission, Indaba Agriculture Policy Research Institute, and World Fish.

DATA ANALYSIS PROCEDURES

The data analysis process, as guided by Oso and Onen (2005), involved a series of tasks aimed at organizing, interpreting, and presenting collected information. This multifaceted approach included preparatory steps such as transcription, optical scanning, field note typing, and categorization based on data sources. The data was systematically grouped into themes using manual color coding. Qualitative data from various sources was organized around emerging themes and sub-themes, providing a framework for exploring research questions. Interview responses were categorized under identified themes, facilitating objectivity and nuanced interpretation.

A detailed analysis employed a coding process, segmenting textual data into meaningful chunks and applying numeric codes reflective of identified themes. Thematic analysis, aligned with research objectives, formed the core of the analytical process, ensuring an exploration and contributing to a rich understanding of the phenomena under investigation.

FINDINGS

The data were gathered from key informants and women who participated in small-scale fish farming, sampled from seven districts of Lusaka Province, Zambia. Following data analysis, the findings were organized into five main themes.

Form of Women Participation: The study found that women's participation in the fish value chain in Lusaka province, Zambia, was substantial, estimated at 50-80%, with the majority concentrated in the trading sector. Various forms of participation were identified, including fish production through aquaculture,

primary processing, and sales to diverse customer bases. Women were further engaged in both traditional and modern processing methods, and packaging practices varied based on the availability of resources. After fish production and primary processing, the produce was sold to individuals for household consumption as well as to processing industries (wholesale/retail vendors) for further value addition and onward sale. It was noted that most of the women were engaged in direct sales without branding or pre-packaging due to limited capital and machinery. However, some employed varied packaging practices (e.g., unbranded plastic bags for gutted/ungutted fish, packaging of fish fillet) based on available resources and infrastructure. Additionally, the women employed traditional methods such as gutting, sun drying, and smoking the fish prior to selling. In their activities in the fish value chain, the women indicated that they sourced their inputs from various companies on the market that provide the service and therefore were not limited to one source.

Women and Decision Making within the Value Chain: In the local associations related to the fish value chain, the representation of women in leadership roles was low, with one to two female leaders observed to be part of the executive committee. For the districts covered, only two had aquacultural associations of small-scale aquaculture farmers or associations of fish farmers; namely Rufunsa and Luangwa. When asked to state how many leaders were in each association; the numbers ranged from 2 to 3 out of a leadership of 10-12. Notably, there were no dedicated local associations specifically focused on women fish farmers.

The Policy Framework Guiding Women's Participation in the Fish Value Chain: The study examined the policy framework guiding women's participation in the fish value chain in Zambia. Using the gender lens, the Second National Agriculture Policy, National Aquaculture Trade Development Strategy, and the Zambia Aquaculture Enterprise Development Project (ZAEDP) (2014-2024) were reviewed and analyzed, including the role of constituency development funds.

Analysis of the Second National Agriculture Policy revealed that while it acknowledged the importance of gender equality in the agriculture sector, it lacked explicit and targeted measures to address the unique challenges faced by women. Instead, it provided guiding principles and objectives without specific provisions for gender inclusivity and empowerment. This suggested a need for more language and provisions within the policy to effectively promote women's participation and advancement in the agricultural value chain, particularly the fish value chain.

The analysis of the National Aquaculture Trade Development Strategy (2014-2024) indicated a similar pattern to the Second National Agriculture Policy. While the strategy acknowledged the importance of the aquaculture sector and its potential for economic development, it lacked explicit measures to address gender disparities within the industry. Similarly, the strategy provided guiding principles and objectives without specific provisions for gender inclusivity and empowerment.

The Zambia Aquaculture Enterprise Development Project (ZAEDP) underscored a similar trend observed in the previous policies. While the project aimed to promote aquaculture enterprise development, it did not explicitly prioritize gender considerations in its objectives and guiding principles. It lacked specific provisions to address the unique challenges and opportunities faced by women in the aquaculture sector.

Analysis of Constituency Development Funds (CDF) indicated that gender considerations were not clearly outlined in its objectives and guiding principles. While the CDF aimed to promote local development, it did not contain specific provisions to address the unique challenges and opportunities faced by women within constituencies.

Respondents Knowledge, Opinions and Recommendations with Respect to Existing Policies

The study inquired into respondents' knowledge of the main policy instruments governing commerce and industry in the sector, examining perspectives on how these policies improved women's participation and

empowerment in the value chain. It also explored participants' perspectives on the measures that could be taken to ensure women were informed about policy initiatives and the extent of their engagement in policy formulation. Respondents' proposals to reform policies and enhance women's participation and representation in the fisheries value chain were also presented.

The research also found the various ways in which these policies improved women's participation in the fisheries value chain. Participants were more concerned about the benefits of tax incentives, as indicated by one respondent below:

".... tax incentives and subsidies directly impact women's participation in fish production and trade. These policies reduce financial barriers and make it easier for women to comply with quality and sustainability standards." (Respondent 44: Fish Farmer).

Additionally, it was indicated that:

".... initiatives targeting women and gender-sensitive policies are making a real difference. They bridge the gap and give women like me access to skills, technology, and support." (Respondent 6: Fish Farmer).

Participants further indicated that having women in leadership would give them an opportunity to make decisions. One participant said:

"The policies pushing for more women in leadership roles are important. It's about giving us a say in the big decisions. Women's voices matter, and these policies make sure they're heard." (Respondent 55: Fish Farmer).

More insight was given by key informant as well as the women on the importance of establishing cooperatives that:

"The establishment of cooperatives enables women to collaborate and access financial support, such as the Constituency Development Fund (CDF). Through these cooperatives, women can leverage resources and achieve economies of scale, enhancing their overall business performance and resilience" (Interviewee 9: Key Informant)

Respondent 3: Fish Farmer

"Cooperatives are our source of information. They keep us updated on policy changes and opportunities. Being part of a cooperative means being informed and empowered."

According to the key informants, the crucial factor in bolstering women's participation in policymaking was women empowering one another through the dissemination of knowledge. Workshops, often overlooked, were identified as an important source of information for the women.

Another key informant noted that mentorship programs should be encouraged because, in these programs, both mentors and mentees engage in an exchange that goes beyond traditional education. These programs were not just lessons; they were living testimonials that demonstrated how women helping women could orchestrate success stories. They also served as a means for women to stay updated with the latest policy developments and programs. The more experienced and exposed women informed those who were upcoming in aquaculture.

Concerning the extent of women's engagement in policy formulation for the fisheries value chain, the study found that despite efforts to involve women in policy formulation, the extent of women's engagement and involvement in this process remained relatively low. Women were often relegated to lower-level decision-

making positions, limiting their influence in shaping broader sectorial policies. A sentiment pointing to this is given hereafter:

Respondents 3: Fish Farmer

“Honestly, I’ve seen women’s involvement in policymaking is still not at its best. We’re often kept at the lower rungs of decision-making, which doesn’t do justice to our contributions.”

To improve women’s participation in policy formulation and reform, the participants recommended involving women in policy-making, recognizing that they are directly impacted. They emphasized the importance of putting women in leadership positions so that their perspectives could be heard at the decision-making level. Capacity building was also highlighted as crucial to ensuring that women are aware of and understand the guiding policies that shape practices in the aquaculture industry.

The participants further pointed out the significance of involving women’s organizations and cooperatives in policy discussions. This approach aimed to gain insights from the grassroots level, facilitating the development of more inclusive policies. The recommendations collectively reflected a commitment to addressing the gender disparities in the aquaculture sector through proactive and participatory policy-making processes.

DISCUSSION

The study revealed that women were actively involved at different nodes of the fish value chain. Women engaged in various value chain components, illustrating autonomy and self-sufficiency. It reported on the adaptability and resourcefulness of women in the fish value chain, in similarity with the perspectives of Williams (2002), FAO (2013), and Githukia et al. (2020). The flexible and manageable scale of operations that women typically engaged in allowed them to overcome barriers and strike a balance between their entrepreneurial pursuits and other responsibilities. This reiterated the importance of small-scale operations in facilitating women’s entry and growth in the sector, as outlined by Laven et al. (2009) and Coles & Mitchell (2011).

The study also showed the substantial level of engagement of women in the fish value chain. Similar observations were made by Shalesha & Stanley (2000, 2001), Mafimisebi (2007), and Olufayo (2012). These scholars reported on the important role that women played in various segments of the value chain, ranging from primary production to downstream processing and trading. The study also corroborated the assertion that women were not confined to traditional roles but actively engaged in diverse commercial aspects of the value chain, as emphasized by the FAO reports (2004, 2006).

The study’s observation on the partnership between men and women in various aspects of the value chain corresponded to the evolving dynamics discussed by Lyon et al. (2019). The cooperative approach was recognized as instrumental in broadening the skill set applied across different stages of the value chain, reflecting the need for a range of competences highlighted by the study. This cooperative spirit was seen as transformative in reshaping traditional gender dynamics, in line with the argument put forth by van Eerdewijk et al. (2017). It was imperative that small-scale farmers were encouraged to take advantage of the Cooperative Societies Act, 1998, to benefit from the activities of cooperatives.

The study also highlighted the underrepresentation of women in leadership roles within local associations. This corroborated the observations made by FAO (2012) and Githukia et al. (2020) regarding the limited representation of women in senior management positions within the aquaculture sector. The lack of dedicated associations for women fish farmers further underscored the existing gender disparities in accessing resources and support systems, in alignment with the concerns raised by Williams (2000) and

Ndanga et al. (2013) regarding the unequal distribution of benefits and access to production factors.

The underrepresentation of women in leadership roles highlighted broader gender imbalances in decision-making within the industry. The absence of dedicated associations specifically focused on women fish farmers was particularly vivid. This gap showed a lack of formalized structures designed to cater to the unique needs and challenges faced by women in the value chain. It suggested that women may not have had equal access to resources, information, and support systems compared to their male counterparts. This, in turn, may have limited their ability to actively participate in and benefit from the various stages of the value chain.

The Second National Agricultural Policy in Zambia aimed to promote fair and inclusive development in the agricultural sector, including the fish value chain. However, it lacked specific strategies to directly benefit women. The Zambia National Aquaculture Trade Development Strategy of 2014 to 2024 aimed to address challenges in the aquaculture sector but lacked detailed interventions to promote gender equality. The Zambia Aquaculture Enterprise Development Project (ZAEDP) aimed to enhance economic diversification, food security, and sustainable employment generation but lacked a gender analysis. The Constituency Development Fund (CDF) also lacked gender-responsive strategies, particularly in ensuring active participation, representation, and empowerment of women in the fisheries sector. Establishing specific targets would have demonstrated a strong commitment to gender equality and provided a framework for monitoring progress and accountability.

The Second National Agriculture Policy in Zambia, as evaluated, supported the WID Theory in several ways. Principle 5.3 emphasized fair and inclusive development, acknowledging the importance of gender inclusivity in agricultural development efforts (Dale, 2020; Moser, 1993; Longwe, 1995). This conformed to the WID Theory's emphasis on the active participation of women in value chain development. However, the weakness lay in its generalized language, highlighting the need for more specific strategies to directly benefit women (Dale, 2020; Moser, 1993; Longwe, 1995). This supported the WID Theory's assertion that development should not happen to women, but rather, women should actively participate and benefit from it (Oakley, 1974).

The National Aquaculture Trade Development Strategy particularly adhered to the WID Theory's call for recognizing the multi-faceted nature of women's participation in value chains. However, the strategy fell short in providing specific gender-sensitive strategies and so deviated from the two theories' predilection towards practical empowerment and specific interventions to address gender disparities (Dale, 2020; Moser, 1993; Longwe, 1995). The strategy's lack of measures for attaining gender equality and equity within the fish value chain brought out a gap in identifying and dealing with the specific needs and challenges faced by women in aquaculture.

The Zambia Aquaculture Enterprise Development Project (ZAEDP) showed potential for transformative impact in the aquaculture sub-sector. Yet, it fell short in terms of gender responsiveness due to the absence of a gender analysis and gender-sensitive targeting approach, highlighting a gap in recognizing and addressing the specific challenges and opportunities faced by women (Dale, 2020; Moser, 1993; Longwe, 1995).

The Constituency Development Fund (CDF) in Zambia represented an important initiative for local development. Even so, the absence of explicit quotas for women's representation within cooperatives and project leadership roles brought out a shortcoming for resolving the specific challenges and opportunities faced by women in fisheries. The CDF could have benefited from incorporating targeted financial incentives and support mechanisms to enhance women's access to funds. This would have facilitated their active participation and contribution to the fisheries value chain.

It was clear that women were actively involved in the fish value chain despite the many challenges they faced. Most of the country policies were not gender-sensitive, making it difficult for women to fully benefit from available resources and market incentives in aquaculture.

CONCLUSION

In conclusion, this research illuminated the pivotal role played by women in the fish value chain within small-scale farming in Lusaka Province, Zambia. The study underscored women's substantial contributions to trading and processing, demonstrating their adaptability through a combination of traditional and modern methods. However, a key revelation was their minimal or nonexistent participation in policy formulation, necessitating gender-responsive approaches in policies formulating and programs. Recognizing the existing gap in promoting gender equality, the study advocates for a tailored, gender-responsive policy framework for the fisheries sector. We propose measures, including gender-responsive budgeting, capacity-building programs, equal representation in community management committees, awareness campaigns, enhanced market access, networking platforms, and technology adoption, which should collectively be aimed at empowering women in the fish value chain. The findings from this study not only deepened our understanding of women's nuanced participation but also provided a basis for advocating for tangible steps toward gender inclusivity, fostering an environment where women could fully realize their potential and contribute meaningfully to the economic development of Lusaka Province and the broader region. We commend that women should be considered as important and necessary stakeholders in the policy formulation and review process to allow for inclusiveness. In districts that do not have associations, it is recommended that these are encouraged as they serve as a hub for knowledge sharing; and women should be considered in leadership positions so that they fully participate in decision making. Additionally, longitudinal studies are recommended as a strategic means to continually improve interventions and thoroughly evaluate gender inclusivity in the fisheries sector over time and to tract the impact of existing policies over time.

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