



Rift Valley Institute

MAKING LOCAL KNOWLEDGE WORK

## BEYOND THE SURFACE:

Unraveling the transition from subsistence fishing to commercialization and the realities of women's participation in fishing markets

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SOUTH SUDAN WOMEN'S RESEARCH NETWORK

RESEARCH GRANTS - ROUND ONE

## **SOUTH SUDAN WOMEN'S RESEARCH NETWORK**

This report is a product of the EU funded South Sudan Women's Network (SSWRN), which provides research grants, training and mentorship to early career female researchers in South Sudan. The project aims to ensure that women's perspectives are included in the research and decision-making on development issues in the country.

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## **PHOTO CREDIT**

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# EXECUTIVE SUMMARY

This report provides an overview of women in the fisheries sector in Bor, Jonglei State. It focuses on the implications of households' transition from different subsistence livelihoods, including farming, herding and fishing, to commercial fishing, the impact of displacements due to conflict and climate change, women's participation in the market and the impact on gender roles, and how the shift to commercialized fishing has affected women's welfare.

Traditionally, the communities in Jonglei relied on fishing to supplement their diets seasonally, fishing in the flood plains and along river margins. Over time, some households shifted to subsistence fishing fulltime, or recognized its potential as a cash crop. The transition into commercial fishing, driven by factors such as cattle raids and climate-related challenges, marks a significant change in livelihood strategies for many households. While some households turned to fishing as a livelihood after their farming or cattle rearing activities were disrupted, others had been fishing for generations, long before fishing became a lucrative commercial enterprise. The market-orientation also led to changes in fish preservation methods, such as salting and smoking, based on evolving consumer tastes and opportunities for higher profits. This transformation has not only improved household income but also provided employment for displaced individuals, contributed to the local economy and opened export markets with neighboring countries.

This shift created profound changes within local communities, particularly for women. Fishing has become a crucial source of income, offering stability and opportunities and women, who had assumed leading roles in their households due to conflicts, have sought to capitalize on the opportunities offered. Gender inequality in fisheries is primarily due to cultural norms and perceptions on 'appropriate' gender roles. Resistance to women's involvement stems from the expectation that they will focus on their traditional role as nurturers responsible for childcare. In addition, there is the perception that women are physically weaker and are not supposed to engage in tasks that require prolonged bending or standing. This gendered division of labour perpetuates disparities between women and men in access to resources, decision-making power and participation in the value chain. The participation of women in the fishing industry reflects a broader change shift in gender roles within households and increased women's empowerment. It is essential, however, to recognize that this transformation is complex, with both positive and negative consequences.

The report emphasizes the importance of supporting women's participation and empowerment in fisheries through several interventions and strategies with the following focus.

- Empowering women in the fishing industry requires a comprehensive understanding of their roles within the market ecosystem, addressing their specific needs at various points in the ecosystem.
- Efforts to support diversifying livelihoods for resilience should involve women and explore opportunities open to them at various stages in the value chain, such as processing, packaging and transportation.
- Expanding women-specific training can improve their skills, efficiency and safety, and boost their confidence in leadership roles.
- Linking cultural awareness to empowerment involves implementing community awareness campaigns and educational initiatives to promote a more gender-sensitive understanding of investment in fishing infrastructure.
- Balancing social dimensions by recognizing the diverse social dynamics within communities is paramount. In conflict-prone regions like South Sudan, empowering women is essential, considering their pivotal role in community development. Simultaneously, attention must be paid to providing opportunities for disaffected young men who otherwise may act as spoilers due to factors such as unemployment and armed aggression.

The report recommends coherency within government policy to ensure that the fisheries sector and women's activities therein are prioritized. It urges state agencies, the private sector and CSOs to ensure that gender is mainstreamed into policies and programmes for the sector, including technology development, research and data collection.

# INTRODUCTION: SIGNIFICANCE OF FISHING IN JONGLEI

Jonglei State in South Sudan boasts a rich and diverse aquatic ecosystem, making it a significant hub for fishing activities. Lying along the eastern bank of the River Nile, Jonglei State is renowned for its extensive network of rivers, swamps and lakes, which provide an ideal habitat for various aquatic species. The fisheries in this region include both subsistence and market-oriented fishing, and they also hold profound cultural and social significance. Women play a pivotal role in the fisheries: catching fish for household consumption, seen as ‘crucial for meeting household nutritional needs’, while also engaging in market-oriented post-catch processing for and sales to local, regional and international markets.

The fishing industry is a vital contributor to employment in Bor, Jonglei State, offering both direct and indirect job opportunities for residents and enhancing the financial stability of participating households. As noted by a lecturer at the John Garang Memorial University, ‘Fishing has become a source for income generation as the sale of fish contributes to household income, which fosters poverty alleviation and promotes development in the state. Women’s earnings from fishing are reported to have a significant and positive effect on household incomes’.<sup>1</sup> Moreover, fishing has spurred trade and commerce in Bor, Jonglei State, connecting local communities to regional markets in Congo, Kenya and Uganda, as well as national markets.

Climate change has had a profound impact on counties in Jonglei along the River Nile, leading to a dramatic increase in the extent and length of flooding that has devastated local herds and crops, and left communities struggling to cope with the economic and agricultural consequences. On the flip side, there have also been some unexpected opportunities. The extensive flooding has led to a noticeable rise in fish populations, creating a silver lining in the otherwise grim situation. The increased fish stocks have not only provided affected communities with a valuable food source but has also income from the processing and exporting of fish to market in Juba and neighboring countries. This has contributed to the local economy and serves as a potential model for how communities could adapt to the changing climate. Fish from the Bor area is in high demand, with over 10 trucks loaded weekly with 600kg fish bundles for export. This underscores the immense commercial potential of the fishing sector if it receives the necessary attention.

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1 KII, Lecturer, Department of Environmental Studies, John Garang Memorial University, Bor Town, 23 March 2023.

Culturally, fishing plays a pivotal role, connecting communities to their traditions and heritage.<sup>2</sup> In the past, cattle herding was prestigious and provided protection from hunger. Traditionally, the least hungry families were often those with significant cattle assets, as these animals provided not only sustenance but also symbolized wealth and status within the community. On the other hand, fishing, while a source of sustenance, was often viewed as a livelihood option for individuals whose prestige had been diminished by the loss of cattle. In recent times, however, there has been profound changes in cattle keeping, driven by shifting climate patterns and evolving cattle herding systems. Environmental challenges and adaptations to new agricultural practices are influencing livelihood strategies and dynamics in Jonglei State. These changes are gradually redefining the traditional roles and values associated with cattle and fishing, leading to shifts in how fishing is perceived, particularly as communities started to commercialize fishing. Additionally, women have assumed essential roles in the market, competing with men in the processing, selling and transporting fish destined for the market in Juba and further afield.

The boom in fish trading has brought not only economic prosperity but is also contributing to social cohesion within the community. Individuals from diverse backgrounds have joined the fishing business, transcending tribal boundaries. Insecurity and climate change-related challenges have also led people from different backgrounds to seek refuge in Bor Town, leading to increased participation in fishing, either as an alternative livelihood or as a commercialized venture. Before fish was recognized as an important economic resource, communities who were displaced were allowed by local residents to resettle in fishing spaces without dispute, even singing songs that named these places.

While fishing has helped to promote social cohesion and interaction among diverse communities, there are also reports of fighting over fishing grounds in Bor and other parts of Jonglei State, reflecting the growing recognition that fish can be a valuable source of income. These conflicts often arise when those from outside of the area are given temporary permission to fish then seek to claim 'ownership' of the areas they are fishing in. Host communities now accuse settlers of overstepping boundaries by asserting ownership of the fishing areas, leading to disputes. The settlers argue that they have been in the area for a long time, adding to the complexity. Unfortunately, these disagreements have resulted in serious fights and violence. The government is now working to address these issues and find solutions to ensure a more harmonious coexistence among communities in fishing areas.

The conflicts over fishing grounds can also exacerbate existing inequalities, leading to the further marginalization of certain communities. As the economic opportunities from fishing became more apparent, outsiders began entering these areas in search of economic opportunities. The interest in commercial fishing and the influx of money have intensified disputes and have often pushed marginalized communities who live in fishing areas to the fringes. Furthermore, when money becomes a driving force in fishing, women can be sidelined and face increased challenges

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2 Quoted in Simone Martino, et al., 'The importance of local fisheries as a cultural attribute: insight from a discrete choice experiment of seafood consumers'. *Maritime Studies* 22/22 (2023).



in accessing fishing grounds and resources. Consequently, the interplay between economic and community interests and gender dynamics can deepen existing inter-communal and gender inequalities, making it crucial for interventions to address these issues in a gender- and conflict-sensitive manner.

# CHANGES IN FISHING PRACTICES IN JONGLEI STATE: FROM SUBSISTENCE TO COMMERCIALIZATION

The capital of Jonglei State, Bor Town is in Bor South County which lies along the east bank of the Nile River, approximately 190 kilometers north of Juba. The Nile River defines this region, which is part of the larger Nile Basin zone, and its residents have relied on various livelihood strategies, including farming, cattle rearing, fishing and gathering other natural resources. Unlike neighboring flood plains further to the east and west of the Nile, however, communities in Jonglei living in the wetlands along the Nile and its tributaries have placed a stronger emphasis on fishing and other river-based livelihoods.<sup>3</sup>

Fishing has been a longstanding and vital practice in indigenous cultures in Jonglei and has been deeply intertwined with their way of life for generations. John W Burton noted that the Dinka and Nuer people were fishermen before they became cattle keepers, and which is why chiefs carry fishing spears as the master of the fishing spear (*beny biith*), and their authority stems from their close relationship with Divinity.<sup>4</sup> According to myth, the prototypical Dinka master of the fishing spear, Aweil Longar, himself emerged from the river. The region's extensive network of rivers, prominently the White Nile and Sobat River, has not only sustained local communities for generations but also fostered the development of settlements along their banks. Traditionally, communities in Jonglei relied on fishing as a seasonal food supplement, often sourced from the flood plains and river margins.<sup>5</sup> Over time, some transitioned to fishing for subsistence, while others recognized its potential as a cash crop. As one resident notes, 'The history of fishing started way back from my forefathers. I am the fourth generation to do fishing.'<sup>6</sup>

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3 FEWS NET, 'Livelihoods Zone Map and Descriptions for the Republic of South Sudan', November 2018, <https://fewsn.net/east-africa/south-sudan/livelihood-zone-map/november-2018>.

4 John W Burton, *God's Ants: A Study of Atuot Religion*, St Augustin, West Germany: Anthropos Institute, 1981.

5 Paul Howell, Michael Lock and Stephen Cobb, eds., *The Jonglei Canal: Impact and Opportunity*, Cambridge, UK: Cambridge University Press, 1988, 537.

6 Oral History interview, fisherman, Leudier port, 21 March 2023.

The most commonly caught fish species in Jonglei State include Nile perch, tilapia and catfish (*Clarias*, *Bagrus* and *Synodontis*), and a variety traditional fishing equipment is used, including gill nets, hooks and lines, long lines, seine nets, cast nets, hand nets, basket and wire mesh traps (locally known as *Egwa*), and spears.<sup>7</sup> There are also different types of fishing vessels that are used, including the *sharoaq* (long canoes), *felukas* (smaller boats), and Murkab Al-Hadeed fishing boats.<sup>8</sup>

The Monythany group (fisherman villages) are Dinka who have prioritized fishing over cattle keeping, and they have been joined by households who turned to fishing when they lost their cattle when their pastures and homesteads were flooded. Households who depend on fishing as their primary income source are often marginalised, as cattle ownership continues to be prized and bring prestige amongst the majority of the Dinka, who often look down on fishermen and see fishing as a temporary occupation that will be given up when they have acquired the capital needed to establish a shop or buy cattle. This attitude was highlighted by a male interviewee, who shared that ‘those who have cattle are perceived to be more important than those who are fishing. People believed that fishing does not generate enough money.’<sup>9</sup> This perspective can even be found among young people, with an interviewee noting that some of the younger Dinka ‘cannot marry because they’re into this fishing business.’<sup>10</sup>

After the Comprehensive Peace Agreement (CPA) was signed in 2005, however, there was a shift toward commercial fishing, marked by the use of larger boats and more advanced equipment for export.<sup>11</sup> The Nile perch emerged as the most commercially valuable fish species in the region and processed Nile perch can be found in markets in various parts of the country, and is also exported to neighboring countries such as Kenya, Uganda, the Democratic Republic of the Congo and Ethiopia. Attitudes towards fishing have shifted, as it was recognized it was a profitable endeavor that can bring significant economic benefits to those who engage in the catching, processing and marketing of fish. This was highlighted by the Director of Fisheries in Jonglei State, who observed that ‘... the thinking has changed as they saw the money coming in.’<sup>12</sup> The transition into commercial fishing has been driven by a variety of factors such as cattle raids, the longer-term inundation of both dry and rainy season pastures, and the migration of the cattle to other parts of South Sudan. As a result, some individuals have turned to fishing as their primary livelihood.

7 Frans Witte et al., ‘Fisheries in the Nile System’, in *The Nile*, ed. Henri J Dumont, Berlin: Springer Dordrecht, 2009.

8 John Sebit Benansio et al., 2021. BKP Development Research and Consulting, ‘Training on socioeconomic monitoring and analysis in fisheries in South Sudan. Final Technical Report’ BKP Development Research and Consulting GmbH.

9 KII, youth member of the fishing association, Bor, 20 March 2023. m

10 KII, young fishermen, Bor Town, 20 March 2023.

11 FAO, ‘Fishing in South Sudan: a rapid assessment of the fisheries sector in Jonglei state’, Juba: FAO, 2020.

12 KII, Director of Department of Fisheries, Bor, 19 March 2023.

An elder fisherman interviewed recounts that fish were caught mainly for subsistence, to either supplement diets or as a survival food that could be used during times of drought, 'Fish were caught for subsistence only. There were no marketplaces for selling fish. Those who didn't know how to catch fish could have their kids starved to death because fish was the source of food'.<sup>13</sup> This did not mean, however, that fish were not a valuable commodity, as one participant whose family traded fish before the arrival of the cash economy noted:

During those days of my great grandfather, fish was caught and eaten at home. And when you had caught enough, they were given out in exchange for grains such as sorghums and maize to the farmers as substitute because human beings sometimes have to change diet. My great grandfather didn't yet know the importance of money and there was no even market available to sell fish. The sale of fish for money started with my father.<sup>14</sup>

The transition from a barter-based to a monetized fish trade marked a pivotal shift in the economic landscape.

Attempts to commercialize the fishing sector in Jonglei State date back to colonial times. In 1951, commercial fishing gained popularity in South Sudan, leading the colonial government to invest in developing fishing stations and improved equipment. Records indicate that this was continued following independence, with the Sudanese government continuing to support fish camps, which multiplied until they were disrupted by the outbreak of Sudan's first civil war in 1972. Sun-dried fish was in high demand, especially in the Belgian Congo, which stimulated trade expansion and attracted merchants from the Southern Region to join the fish processing industry.<sup>15</sup> The first civil war disrupted the government fish camps, just as fishing was emerging as a profitable business, and the second Sudan civil war further disrupted the trade, with an interviewee recalling 'When Arabs traders were still here in 1999, my father would transport bundles of dry tilapia to Mading-Bor to be sold to the Arabs. And when he sold them, he would return to us when he has bought everything like flour, oil, onions and sorghum'.<sup>16</sup>

Respondents aged between 50 to 60 years old remembered the changing landscape within their families long after fish commercialization emerged as a lucrative livelihood in Jonglei, with one participant mentioning:

My great grandfather didn't yet know the importance of money and there was no even market available to sell fish. The sale of fish for money in my family started with my father. In 1980, Mading-Bor was still under the control of Arabs militia and unlike the

13 Oral History, community elder, 21 March 2023.

14 KII, fish trader, Bor, 19 March 2023.

15 Southern Development Investigation Team, 'Natural Resources and Development Potential in the Southern Provinces of the Sudan', A Preliminary Report by the SDIT - 1954, Government of Sudan, 1955.

16 Oral history interviews, elders, Bor Town, 21 March 2023

first commander, the commander who was responsible for the operation of the area from 1984-1988 was good and soft person. He began not to restrict people and therefore, the market for the fish and cattle traders began to open. When market was opened for businesses, my father began to transport pieces of braided dry fish for sell to Mading-Bor market.<sup>17</sup>

Others also began to shift to fishing from other livelihoods, recognizing that fishing was profitable, when circumstances allowed the trade to continue.

The transition to commercial fishing also brought changes in fish preservation methods. Initially, sun-drying was the norm, but regional markets and consumer preferences led to the adoption of salting and smoking. A fourth-generation fisherman in his family noted that:

Our people didn't know other methods of fish preservation like smoking and salting, they were used to drying as their mean of preserving fish. However, in 2002, I went to Juba and saw from Equatorians how fish were smoked. I learned it quickly and came to try in a place called Mayen-Angakuei and Pajerei. I smoked a good number of fish and then transported them to Juba for sale. They gave me good money. I also learned how to do salting from Congolese who I took to a place called Dhiam-Dhiam. So, I began to commercialize and profit from fish since 2002. One thing that motivated me to continue with this business was not because the fish were in access, it was because the buyers outside of Bor began to like the quality of our fish especially the smoked and salted ones.<sup>18</sup>

Another interviewee who transports fish to Juba and Uganda added:

I have been in the business of selling fish that is preserved using sun since 1997, but recently I shifted to selling smoked and salted fish because the money that is got from smoked and salted fish is much. People from other states and foreigners began to like our fish. Their demand of our fish gave us a free space to sell fish outside of Bor. I travel to Juba and even Uganda as well as Congo to sell salted fish.<sup>19</sup>

This transition demonstrates the ability of South Sudanese to recognize and cater to the tastes of their consumers, which has allowed for greater profit, as well as reflects the complexity of the fish market and the need to adapt to changing market dynamics.<sup>20</sup>

In contemporary Jonglei State, particularly in Bor Town, fishing has become a vital source of

17 Oral History, retired fisherman, Bor, 21 March 2023.

18 KII, fish trader, Bor, 19 March 2023; that quote is taken from

19 KII, fish trader, Bor, 19 March 2023.

20 Edward Thomas, 'Moving Towards Markets: Cash, Commodification and Conflict in South Sudan', Juba: Rift Valley Institute, 2019.

income and livelihoods. It is increasingly recognized as a crucial sector that could enhance the country's economy if given proper attention. As one elderly respondent aptly put it:

Look, the most important things for South Sudan are the oil, fish, cattle and maybe the crops we cultivate...So, fish has replaced the three and stood out as the only source for survival by the populace. If fish was not monetized, people would have been dead by now. The population supported by fish money has outlived the population depending on oil.<sup>21</sup>

## SHIFTING LIVELIHOODS

Insecurity and flooding have played a critical role in shifting attitudes towards fishing. Frequent cattle raids by neighboring communities led to significant losses in terms of both cattle and lives, while floods forced many to abandon their farms and cattle. One interviewee from Twic East County recounted that her parents were displaced to a swampy area in 1991, following the Nuer attacks in Greater Bor, and turned to fishing for survival. Another interviewee who had been displaced to Bor Town because of insecurity reflected on the dangers of cattle rearing, saying, "Those who are doing cattle business are always ambushed and get killed".<sup>22</sup> While another noted that "[t]he fishing business had great potential and appeal because it is the only business you do not worry about being killed."<sup>23</sup>

The floods in 2020 devastated large swaths of Jonglei, submerging homes, farmland and critical infrastructure, leading more people to turn to fishing for their livelihood. The inundation of agricultural areas destroyed crops or made fields unusable, and left cattle herders unable to find suitable grazing areas for their livestock. One respondent who was forced to relocate to Bor Town vividly described the impact, saying, "We lost our cows, goats, sheep and chickens to flooding. Crops were left in the granaries. Farms were submerged in water."<sup>24</sup> For households who could no longer farm or keep livestock and had migrated to Bor Town, fishing became a lifeline for their livelihoods. A farmer turned fisherman shared:

After losing all that and being forced to town, I decided to join these women whom you see around me in this business. I was a farmer who could farm enough for my family to survive. I chose to do this business because it is the only business which brings good money nowadays.<sup>25</sup>

Fishing has become a resilient lifeline for residents of Jonglei State who are grappling with the complex interplay of flooding, insecurity and economic shocks. As the spectre of contin-

21 KII, community elder, Bor, 20 March 2023.

22 KII, fishermen, Leudier Port, Bor, 19 March 2023.

23 KII, fishermen, Leudier Port, Bor, 19 March 2023.

24 KII, women fish retailer, Nyok-agany port in Bor, 18 March 2023.

25 KII, women fish retailer, Nyok-agany port in Bor, 18, March 2023.

ued climate change related flooding looms large, traditional agriculture and cattle keeping in Jonglei face unprecedented challenges. Fishing offers a viable alternative livelihood for many households, as they seek to adapt to climate-induced disruptions that threaten the viability of traditional agriculture. Unlike cattle keeping, fishing can be less susceptible to disruptions wrought by insecurity. Moreover, the trade and sale of fish contribute not only to economic stability but also help to empower communities navigating through uncertain times. Furthermore, although fishing was typically seen as less prestigious than cattle keeping, it is deeply interwoven into the cultural and social tapestry of Jonglei State, and as communities unite in reliance on fishing for survival, a collective resilience emerges, bolstering social bonds and fortifying the fabric of these different communities.

Finally, while fishing does offer a viable livelihood option for communities in Jonglei, it is also important to ensure that the fishing industry is using sustainable practices. The communities themselves recognize the need to protect and conserve aquatic ecosystems and responsible resource management is emerging as a shared commitment to ensuring the long-term viability of their lifeline—fishing.

## **WATER MANAGEMENT AND ITS POTENTIAL IMPACT ON COMMERCIAL FISHING**

The economic benefits that South Sudan derives from the Sudd ecosystem is valued at over USD 3.3 billion.<sup>26</sup> Following the flooding between 2020 and 2022, there has been a vibrant debate within South Sudan about whether to complete the Jonglei canal or dredge the Nile in an effort to reduce the extent and duration of annual flooding of the Nile. Both completing the canal or dredging the river could have a long-term negative impact on the wetlands ecosystem, its biodiversity and ultimately, commercial fishing activities. The alteration of water flow and any resulting habitat disruption could lead to changes in fish migration patterns and breeding grounds, which could, in turn, affect the availability and abundance of fish in the region. For example, completing the canal construction or dredging the river might affect the catch size and variety or lead to a decline in the overall fish yield, affecting the income and food security of household's community who rely on fishing either for home consumption or income generation. Furthermore, commercial fishing in Jonglei State is intricately linked to markets and trade networks, and any changes in fish availability and quality could have a negative impact on market dynamics and prices, particularly if water management practices reduce the availability of commercially valuable fish species. While it is recognized that completing the Canal or dredging the Nile could substantively reduce flooding and benefit thousands of people, before any actions are taken, it will be important to consider how these activities could affect fish populations, and by extension, the nascent commercial fishing sector.

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26 Keji Janifer, 'Dredging Sudd Wetlands could be disastrous if rushed - report', *The City Review*, 6 July 2023, <https://cityreviewss.com/dredging-sudd-wetlands-could-be-disastrous-if-rushed-report/>.

# FISHERIES AND GENDER: GENDER PERCEPTIONS AND WOMEN'S ENGAGEMENT IN FISHING

The transition of fishing in Jonglei State from a subsistence activity to a thriving commercial enterprise is a testament to the resilience and adaptability of its communities. As fishing has commercialized, it has transformed lives and livelihoods and has become an important indicator for economic growth. Yet, the question remains: to what extent are women engaged in fisheries, and what benefits do they derive from it to improve their well-being?

The trauma of losing farms and cattle due to flooding and insecurity has had far-reaching implications for women in Jonglei, as many were left widowed and without a means of supporting their families. This pushed many women to turn to fishing to meet both their families' food needs and to generate income. As one woman shared, 'Before I entered into the fish business, I was a farmer and cattle keeper. I began this fish business after I lost my cows and everything I had to the flooding'.<sup>27</sup> Another woman expressed, 'I entered into fish business simply because I lost everything I depended on. I lost my farms, cows, goats, chickens, etc. Literally everything!'<sup>28</sup>

While this transition has provided women with more autonomy, it has also exposed them to new challenges. When husbands are unemployed or have died, women often find themselves responsible for ensuring the family's financial well-being, and fishing has proven to be a viable livelihood option. Women's engagement in fishing has begun to alter traditional gender roles, while also bringing new risks and burdens for women. As many women lack the necessary skills, equipment or access to fishing resources, they can be more vulnerable than their male counterparts when they enter the fishing business and can be dependent on support from male relatives. As one woman noted:

I never fished before. I got into it because it was the only business, I was able to access through my brother. I borrow 40 braids of *Clarias gariepinus* fish from my brother with

27 KIIs, women fish retailers, Bor main port market, Bor Town, 18 March 2023.

28 KIIs, women fish retailers, Bor main port, Bor Town, 18 March 2023.



the aim of paying him after they are sold. And indeed, I sold them, and they were able to give me profit which until today made me a fish seller.<sup>29</sup>

## GENDER ROLES IN BOR'S FISHING COMMUNITY: CHALLENGES AND PROGRESS

In Jonglei, akin to numerous other African fishing communities, entrenched gender roles prevail. Men have traditionally dominated offshore fishing activities such as setting nets, operating fishing boats and catching fish.<sup>30</sup> On the other hand, women play a vital role in post-harvest activities, often shouldering responsibilities for fish processing, smoking and vending at local markets, thereby making substantial contributions to household income and food security.<sup>31</sup> This division of labour has perpetuated gender disparities in access to resources, decision-making power and participation in the value chain, with women often facing impediments when trying to access credit, equipment and training.<sup>32</sup>

Participants in the study emphasized that that gender inequality in fisheries is predominantly due to perceptions and cultural norms, however, there is also more awareness of the deep-rooted causes of gender disparities in their community. Recognizing these issues is a crucial first step in addressing and changing traditional beliefs, potentially leading to more inclusive and equitable practices in the local fisheries sector. Resistance to the idea of women's involvement in fishing largely stems from fears they would no longer fulfill their traditional role as nurturers responsible for childcare. When asked about women hiring fisherman to fish for them, one participant expressed concerns stating: *'If we could have the women joining the business that does not allow them to see their kids for maybe two to three days as, then we are going to have the generation of people who will never have the values and norms of Mony-Jieng (Dinka).'*<sup>33</sup>

Additionally, the perception that women are physically weaker has led to the belief that that women should not engage in tasks that require prolonged bending or standing,<sup>34</sup> as exemplified by this comment, *'Women are not supposed to bend for too long, they are not supposed to spend a*

29 KII, women fish retailers, Bor Town, 18 March 2023.

30 P. Aloo, B. Nyandat, J. Kibwag, D. Murakwa, C. Lwenya, M. Owili and P. Macharia, 'The Role of Women in Fisheries Management in Kenya: Financing of Women Activities in the Fisheries Sector', Conference paper, *Aquadocs*, <http://hdl.handle.net/1834/7170>.

31 Berchie Asiedu, Pierre Failler and Yolaine Beygens, 'Ensuring food security: An analysis of the industrial smoking fishery sector of Ghana', *Agriculture & Food Security* 7/38 (2018); Hadji Saediman et al., 'Economic returns and constraints of traditional fish smoking in North Buton District of Southeast Sulawesi', *IOP Conference Series: Earth and Environmental Science* 782 (2021).

32 FAO, 'The contribution of women in small-scale fisheries to healthy food systems and sustainable livelihoods in the United Republic of Tanzania', Rome, FAO.

33 Oral History interview, chief of Leudier, Bor Town, 21 March 2023.

34 Despite the fact that caring for children and household chores (including crop management) often entails significant physical labour that includes bending and standing for prolonged periods.

*whole day standing, it can affect their child bearing abilities.*<sup>35</sup> Echoing this sentiment, the Director of Fisheries emphasized that men dominate fishing due to the dangers involved, citing risks such as dangerous aquatic creatures and the potential capsizing of boats. Furthermore, the hours of fishing are considered culturally unfavorable for women, often taking place during early and late hours of the day.

This gender-based division of labour is rooted in cultural traditions, whereby fishing and boat-handling skills are typically passed down from fathers to sons. As one community elder stated, 'As an old man who has retired from fishing, my kids will continue the race because it has turned out to be profitable and in abundance'.<sup>36</sup> Expectations about gender roles, however, are evolving driven by various factors. Traditionally, women were barred from engaging in any business within the Mony-Jieng (Dinka) culture and men whose wives engaged in business were stigmatized as irresponsible husbands. Women were limited to cooking fish caught by men, while boys were tasked with scaling and gutting the fish. Amongst cattle keeping Dinka men were, and remain, primarily responsible for livestock rearing, while women managed farming and domestic chores. As commercial fishing increased this division of labour had to be redefined as women became more involved in marketing and distributing fish. Men who were already engaged in commercial fishing began to train their wives in various fishing-related tasks, and women themselves were eager learners. This economic independence and expanded skill set granted women greater decision-making power, and as women's engagement in the fishing industry increased, particularly in processing and selling, men began to acknowledge and adapt to the changing dynamics within their communities and households.

Education and exposure to different lifestyles also contributed to changing perceptions, and the key role that community leaders can play changing attitudes. The Chief of the Leudier community, a prominent fishing hub in Bor, exemplifies the positive impact community leaders can have, stating '*I had never wanted my wife to be involved in fish business or any woman of my area... But after observing the women of other areas who were the first to join the business flourishing and prospering, and no cases of separations or divorces were reported, I began to allow the women of my area to do fish business.*'<sup>37</sup> The fear that women who engage in business might betray or divorce their husbands has reduced as women who engage in various activities along the fishing value chain have thrived and supported their families.

Flooding and insecurity have been catalysts for the changes in gender roles. As families were displaced from their villages and traditional livelihoods were disrupted, women, along with the rest of the family, had to generate monetary income to meet their household's needs.<sup>38</sup> As women

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35 KII, State Director of Fisheries, Bor Town, 20 March 2023.

36 Oral History interview, retired elderly fisherman, Bor Town, 21 March 2023.

37 Oral History, Community Chief, Bor, 21 March 2023.

38 This suggests that women did contribute to income generation before, but not necessarily money – food can also be income. Women contributed to food production – but husbands were reluctant to have them enter the market.

adapted and engaged in business, this challenged the Jieng cultural perception of women's role as solely that of caretakers and housewives. This change can be seen in the remarks made by the head of the fishing association, who noted, *'I must say that fishing has become a means that has allowed many women to participate in the market more than men even.'*<sup>39</sup>

Finally, the efforts by development programs and non-governmental organizations (NGOs) to actively promote gender equality within Bor's fisheries sector have also had an impact. They have provided women fishers with training and resources, advocated for their rights and sought to improve women's access to markets and financial services.<sup>40</sup> Collectively, their efforts are gradually reshaping perceptions towards women and fostering greater gender equality within this crucial sector.

## **WOMEN'S ECONOMIC EMPOWERMENT IN THE FISHING SECTOR: A CULTURAL SHIFT IN BOR**

According to multi-country study conducted by FAO that was released in 2020, in some countries up to 80% of the workforce processing fish are women.<sup>41</sup> In South Sudan, the fishing sector offers women vital economic opportunities within its value chain, primarily in fish processing, marketing and trade. The research findings underscore women's substantial involvement in fish processing, including tasks such as cleaning, filleting, smoking and drying fish. These value-added activities significantly enhance the marketability and shelf-life of fish and helps to reduce post-harvest losses. Women are also actively engaged in fish selling, either as individual traders or as members of larger cooperatives, and play an integral part in ensuring access to affordable, quality fish is provided to consumers. In numerous instances, women engaged in the fishing sector are the primary breadwinners in their households, making fish selling a critical source of income for themselves and their families.

Jonglei State stands out as a particularly lucrative hub for fish retailing, with women playing a predominant role in the supply chain, leading to greater acceptance and recognition of women's contributions to the overall success of the fishing industry. Marketing of fish is seen as suited to women, since it does not necessitate extended periods away from their families, and is aligned with the cultural norms of the Dinka community. The acceptance of fish selling as a viable business for women signifies a notable change in the community's mindset, empowering women to achieve financial and economic independence.

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39 KII, fishing association member, Leudier port, Bor Town, 21 March 2023.

40 David Majur Awuou, 'While UNMISS support has helped improve livelihoods at Bor Fish Market, more needs to be done', UNMISS, 24 March 2022, <https://unmiss.unmissions.org/while-unmiss-support-has-helped-improve-livelihoods-bor-fish-market-more-needs-be-done>; UNDP, 'New Fish Storage Facility Launched in Greater Jonglei', 2 July 2018, <https://www.undp.org/south-sudan/press-releases/new-fish-storage-facility-launched-greater-jonglei>.

41 FAO, 'Fishing in South Sudan'.

As highlighted by participants, as recently as a decade ago women managed scaling, gutting and cooking fish for household consumption. However, as commercial fishing increased, women have increasingly engaged along the value-chain, engaging in activities such as salting, smoking, drying, selling and even catching fish. Women who take part in fish selling are perceived as better off than those who have not embraced this business, and women retailers reported that their involvement in the fishing sector has led to significant and positive improvements in their lives.

Firstly, by taking part in the market, women reported they were able to generate the income needed to meet essential needs. A key priority reported by many women was the education of their children, and the income from fishing provides women with the financial means to cover school fees, purchase school supplies and ensure their children have the opportunity to learn and grow. As one woman, a widow who lost her husband in one of the Murle's attacks stated, 'I am the one who is paying the tuition fees for my two daughters and four sons. Moreover, the food we eat comes from the money I get from the sale of fish.'<sup>42</sup> Improved access to health services was another benefit highlighted by women: with the steady income fishing provides, women can afford to cover medical expenses, ensuring that their families have access to necessary healthcare services when needed. Finally, women are using the income to diversify their family's diet and explore a variety of food options, contributing to a more balanced and healthier diet for their families, leading to improved nutrition for their children and enhanced food security within their households.

Fishing has provided women with a degree of financial independence, allowing them to support their households. Through activities like sun drying, salting, smoking and selling fish, women have gained access to and actively participate in the market, marking a transformative shift in their economic roles and contributions. The women interviewed take great pride in being able to pay tuition fees for their children, meet their family's health care needs and contribute to the overall financial wellbeing of their families through their fish marketing activities. Nonetheless, this also reflects the cultural expectation that even if women are engaging in business, the income generated should be used to take care of the needs of the household and children. Women in Bor have demonstrated their resilience and adaptability as they have navigated the tensions between traditional values and engaging in activities that are outside of gender norms in order to meet the practical needs of their families.

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42 KII, fish retailer in main port Nyok-agany, Bor, 18 March 2023.

# ECONOMIC BARRIERS AND THEIR IMPACT ON WOMEN IN THE FISHING SECTOR

Commercial fishermen use a variety of methods to catch fish, including fishing nets, fishing lines with hooks, fish traps and traditional fishing boats. The poor quality of equipment, the poor state of fishing vessels, the scarce availability of replacement parts and difficulty in keeping fishing equipment in working conditions all have an impact on the number of fish that can be caught.<sup>43</sup> In addition, fish processing methods continue to rely on traditional techniques and locally available resources. The primary methods employed include drying, smoking and salting, mainly due to the absence of refrigeration that is needed to prevent fish from spoiling. Due to consumer preferences in neighboring countries, a main export market, the amount of fish that is smoked or salted is increasing, as noted by the Chief in Leudier who stated that ‘Smoked and salted fish have attracted foreign traders from Uganda, Congo and Rwanda because they don’t favour the sun-dried and braided variety.’<sup>44</sup>

To enter the fishing business, individuals need a combination of skills, equipment and financial resources. For those catching fish, being able to safely navigate a canoe in deep waters, and having the money needed to purchase equipment such as gillnets, a canoe and a knife for fish cleaning is crucial. Similarly, to process fish, an individual has to purchase the raw fish, have skills and money to build a smoking kiln or oven, buy suitable wood that doesn’t produce harmful fumes, drying mats or surfaces and storage containers to prevent moisture, which could lead to spoilage. Even the cost-effective sun-drying method includes costs such as acquiring or building drying racks, nets or other equipment used in the fish drying. ‘Money is required in every business. For those who do salting, they need money to buy bags of salt, they need to have drums, knife and tarpaulins for covering drums,’<sup>45</sup> explained one community elder about the financial requirements to enter the fishing business.

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43 John Sebit Benansio, et al., ‘Fish community composition indicates low impact of capture efforts in the sudd wetlands of South Sudan’, *European Journal of Ecology* 7/2 (2021): 40-53.

44 Oral History interview, elderly chief, Bor town, 21 March 2023.

45 KIIs, community chief, Bor, 21 March 2023.

## EMERGING FACTORS DRIVING THE MONETIZATION OF FISHING IN BOR

A number of factors can contribute to the shift towards commercializing fishing in rural communities, such as economic diversification, population growth, employment opportunities, and export potential.<sup>46</sup> In the case of Bor, three major reasons were attributed to the shift to commercializing fishing and are outlined below.

### *Climate Change and Environmental Factors*

Changing environmental conditions and climate patterns have reshaped the fishing landscape in the area, pushing many towards commercialized fishing to capitalize on the increased number of fish because of flooding. As explained by the Director General for Agriculture Mechanization and Programs in Jonglei State, ‘The number of fish has increased, as the flooding created vegetation that fed the fish and they multiplied. The last two years saw an increase in the number of fish.’<sup>47</sup> The increase in fish availability, combined with the high demand for fish from South Sudan, has led to the booming of the fishing business.

### *Employment Opportunities*

In terms of employment opportunities, a significant proportion of individuals engaged in fishing are relatively new entrants to the industry, and as many were either farmers or cattle keepers, they either had no or only limited experience with fishing. When the region was affected by extensive flooding and heightened insecurity in 2020, a considerable number of individuals migrated to Bor Town and turned to the fishing sector for their livelihoods, as the loss of cattle and farmlands left them with few other options.

This shift has had notable ripple effects. The fishing industry has emerged as a significant source of employment for both residents of Bor and internally displaced individuals who arrived in town fleeing floods and insecurity. There are a variety of employment opportunities available ranging from catching fish to processing and selling. Consequently, fish has assumed a crucial role for many households as a means of generating income, and as one individual from the fisheries department in Jonglei State aptly expressed, ‘Fish has become an important monetary source, and the potential for commercialization has grown as it is now viewed as a viable avenue for improving livelihoods.’<sup>48</sup>

46 Marisa Kashorte, ‘Moving subsistence fisheries to commercial fisheries in South Africa’. United Nations University: Fisheries Training Programme, 2003; Ragnar Arnason and Marisa Kashorte, ‘Commercialization of South Africa’s Subsistence Fisheries? Considerations, Criteria and Approach’, *International Journal of Oceans and Oceanography* 1/1 (2006): 45-65; David Tschirley, et al., ‘The Rise of a Middle Class in East and Southern Africa: Implications for Food System Transformation’, *Journal of International Development*, 27/5 (2015): 628-646. Alexander Kaminski et al., ‘Commercialization and upgrading in the aquaculture value chain in Zambia’. *Aquaculture* 493/1, (2018): 355-364.

47 KII, State Director of Fisheries Department, Bor, 20 March 2023.

48 KII, state Fisheries Department employee, Bor Town, 20 March 2023.

### *Export Potential*

The fish harvested in Jonglei State are of exceptional quality and is in high demand in neighboring countries, thereby contributing to South Sudan's foreign exchange earnings. This newfound potential has sparked a shift in the local attitudes towards fishing beyond catching fish merely for household consumption or meeting domestic demand. One commercial fishing pioneer, who was initially only transporting fish to Juba for sale in the local market, has now expanded his operation to include Uganda, the Democratic Republic of the Congo and Rwanda. Reflecting on how his business has developed since 2002, he remarked:

The fish business began in the area not because it was in access, it was because many people began to demand the fish. You know, the size of our fish is different from the fish of the other places. our fish are giant, long and have good taste. Look at tilapia, clarias and heterotus, they are not available in other places.<sup>49</sup>

Another fish trader interviewed in the Bor boatyard (Nyok-Agany) had a similar sentiment, 'One thing that motivated me was not the sheer abundance of fish, but rather the growing preference from buyers outside of Bor for the quality of our fish, particularly the smoked and salted varieties.'<sup>50</sup> This has spurred a burgeoning export market and reshaped the local fishing industry's outlook.

The export potential of the fishing industry has not only caught the attention of the local populace, it has also attracted entrepreneurs from outside of Jonglei. A Moru<sup>51</sup> lady engaged in the fish salting business shared her perspective, saying, 'I learned from my Ugandan neighbor that fishing is the new guaranteed business in South Sudan, so I left my home in Juba to come and work in the fish salting business. I don't regret my decision to enter into this business.'<sup>52</sup> Her story exemplifies the opportunities within the burgeoning South Sudanese fishing sector, and its ability to attract individuals from outside of Jonglei who see the economic opportunities the sector can offer.

## **SOCIAL AND ECONOMIC DIMENSIONS OF THE TRANSITION TO COMMERCIAL FISHING**

The shift from traditional subsistence fishing to commercial fishing in Jonglei State has brought about substantial economic and social changes. This transition is enhancing economic prospects through increased income and employment opportunities; however, it is also having an impact on cultural traditions and social dynamics within fishing communities, and the switch from pastoralism and farming to commercial fishing is reshaping the social fabric in the state in profound ways.

49 KII, fish trader, Bor Town, 19 March 2023.

50 KII, fish transporter, Bor Town, 19 March 2023.

51 A tribe native to Western Equatoria

52 KII, fisherwoman, Pariak Boma, 23 August 2023.

One of the primary social impacts has been the transformation of social organization within communities in Jonglei. Pastoralism has been a way of life for centuries and is deeply ingrained in communities' traditions and social structures. As communities switched to fisheries and adapted to new economic practices, this influenced their traditional social structure and customs. As one community member who shifted from cattle keeping to fish trading and transporting remarked, 'Fish business you sell, you get money, but not in cattle; with cattle you just need to be famous.'<sup>53</sup> With fishing there is a direct correlation between selling fish and earning money, where one's financial gain is directly tied to their involvement in the fish trade. On the other hand, cattle keeping has a different dynamic, as the main focus is not on financial gain but rather on fame or social prestige, as owning a significant number of cattle can elevate one's social standing within the community.

Furthermore, the switch to fisheries has significantly altered the local economy and income distribution. Fishing requires different skills and infrastructure than pastoralism and farming, creating new employment opportunities and income streams. Consequently, this has led to changes in wealth distribution within the community, potentially resulting in new inequalities. As a young fisherman noted:

I have two years now in this business, but I've achieved something many youths couldn't do in the past. I bought a plot. If I did not join the business, I would not have been able to get that. Our family is large and I'm paying and supporting 12 people in the house. Fishing is a very good business that supports the mission of employing youth.<sup>54</sup>

Another fish trader highlighted that:

The money we get from fish can't be gotten in any business. As somebody who has been in this business for quite some time now, I have educated my four children to the level of the university, I have married my second wife. The same to my elder sons, they had married using the fish money.<sup>55</sup>

In Dinka culture, cattle traditionally symbolize wealth and status, influencing marriage practices. Men are expected to provide a certain amount of cattle as dowry to the bride's family, creating pressure to accumulate wealth (in the form of cattle) and leading to competition and conflicts over cattle ownership. Cattle, however, are vulnerable to floods and insecurity, both of which have affected Jonglei, and fishing has provided men with the income needed to rebuild their wealth by purchasing cattle.

Women's perspectives on wealth creation through fishing differ. They do not see themselves as well-off as men, and their earnings are often focused on meeting essential family expenses, such

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53 KII, youth fisherman, Bor Town, 20 March 2023.

54 KII, youth fish trader, Leudier Port, Bor Town, 20 March 2023.

55 KII, fish trader, Bor Town, 18 March 2023.



as education, health care and food. A study by the International Organization for Migration (IOM) highlights the unequal access women have to resources and opportunities in the fishing business. It found that men tend to occupy higher-paying roles in the fishery value chain, such as fishing and transportation, and benefit from greater access to financing and technology. Not surprisingly, this gender imbalance also extends to decision-making processes at the household and community levels.<sup>56</sup>

Lastly, the shift to fisheries has also had an impact on cultural practices and beliefs. Fishing, once viewed as inferior to cattle keeping, has become a major industry in Jonglei and reshaped the community's cultural identity. Traditional beliefs about the perceived shamefulness of fishing are fading as traders from across East Africa come to buy fish, and the sector is increasing generates foreign currency. export volumes from South Sudan.

## EMPOWERING WOMEN THROUGH THE FISHING SECTOR?

The fishing business, especially fish retailing, is increasingly viewed as highly profitable, with women playing a significant role in its supply chain. This is largely because fish retailing is seen as a suitable occupation for women as it allows them to remain close to their families, which aligns with Dinka cultural norms that discourage women from spending extended periods away from home.

Historically, in Jieng culture, women were forbidden from engaging in market activities, and these cultural norms were strictly adhered to. Over time, however, these norms are changing due to the influence of capitalism and the movement of people to areas where monetary transactions are the norm. Consequently, the fishing business, among others, has opened doors for women to participate actively in the market, particularly in Bor.

The idea that fish selling is culturally accepted as a viable business for women signifies a notable shift in the community's mindset, fostering greater financial and economic independence for women. However, the extent of women's participation in markets hinges on a combination of cultural norms, economic opportunities and access to resources. When interviewing a woman selling fish in the market, she shared that:

In Jieng culture, women were not allowed whatsoever to sell in the market. They were norms of the culture that they could not break. But now, that culture is fading away as a result of civilization and migration of people to places where daily activities are done using money. So, to me not only fish business that has allowed women to be a part and parcel of the market, but other businesses as well have opened doors to many women in Bor, to be specific.<sup>57</sup>

There has been a growing acknowledgment that women play a crucial role in the fishing

<sup>56</sup> IOM, 'Gender assessment of the fisheries value chain in Jonglei State', Juba, South Sudan: International Organization for Migration, 2017.

<sup>57</sup> KII, fisherwoman, Bor main port, 18 March 2023.

industry, leading to efforts aimed at promoting their market participation. These initiatives include providing women with training and resources to enhance their fishing skills and facilitating their access to markets for their fish.<sup>58</sup> Nonetheless, insecurity, floods and economic shocks are the primary reasons for women entering the fishing business. When their husbands have been killed during cattle raids, women become the head of the household and need to generate an income. In other instances, where husbands are unemployed or disinterested in employment, women have assumed the financial responsibility for their families and fishing has become a means for them to generate the income needed. Not surprisingly, according to those interviewed, the number of women in the fishing business surpasses that of women engaged in other businesses in Bor.

Women did report, however, that they faced relatively low barriers to engaging in the fishing sector, which has been a significant motivator for their market participation. Some emphasized how easy it was to start sun-dried fish retailing businesses, indicating that that sun-dried fish is a key entry point for women, because of the relatively lower cost needed to start up and the skills needed to dry fish were easy to learn. A 28-year-old woman who was an IDP mentioned taking personal loans from family and friends to kickstart their business: 'I approached my friend who later gave me the money to start a business. After careful consideration, I chose the fish business based on my friend's advice, as it was profitable and easy to start simultaneously.'<sup>59</sup> The fisherwomen interviewed highlighted the importance of drawing on social capital and networking to enter the market:

What is required is to know people and have mutual understanding with them. If you don't have money, you can be given fish to sell first and then, later, you pay back that money. Also, if you want to go to where fish is caught, you can still need friends to help you. They can borrow you some gillnets, and then, you can pay them back later. To me, networking is the foremost consideration if you want to enter the market and engage in the fish business.<sup>60</sup>

As a result, fishing has become a popular business that has provided women with access to market participation, financial independence and stability. As a result, through their involvement in the fishing industry, many women are now the primary breadwinners for their households.

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58 Dorothy Lucks and Lona Luduro. 'Independent Terminal Evaluation: Upgrading the Fishery Sector in South Sudan', UNIDO, Project ID 120447, 2021.

59 KII, female fish retailer, Bor main port, 19 March 2023.

60 KII, community elder, Bor Town, 20 March 2023.

## IMPLICATION OF FISH COMMERCIALIZATION ON HOUSEHOLDS AND WOMEN'S WELFARE

The impact of market fisheries on the welfare of women and their families varies depending on several factors, including the social, economic and cultural context in which they operate. Women have gravitated towards selling and processing fish, which aligns with cultural norms and expectations, rather than engaging in catching. In some instances, women's participation in the market fishery has led to positive outcomes, such as increased income and improved food security. In other cases, however, it has resulted in negative consequences that adversely affect women's well-being, including increased workloads and reduced time for other activities. A recent study looked at the historical, economic and cultural changes in Bor and found that women often entered the fishing sector to meet essential social requirements, primarily to ensure the safety and future prospects of their children, such as access to education and desirable spouses.<sup>61</sup> It also found that men were more likely to spend their earnings on luxury goods and bridal gifts, rather than saving or investing in productive means. Nevertheless, the transition from subsistence fishing to a more commercialized approach has had a significant positive impact on women and household welfare in Bor. As one interviewee noted, 'Women entered fishing with the intent of making a livelihood, which was considered work for poor people, but now it is helping families as men and women alike can financially cater to their families.'<sup>62</sup>

Research has consistently shown that when women have access to and control over the resources and benefits of the market fishery, it can contribute to their empowerment and overall well-being. Such participation can lead to improved social and economic status, increased decision-making power within their households, and greater self-esteem and confidence.<sup>63</sup> Interviewees did have mixed views on the change in their social and economic status, however, with some reporting a positive change, earning the community's respect for their role in providing for their families.<sup>64</sup> At the same time, others, particularly displaced women, have been called derogatory terms, like 'Thany', signifying fisher, as a way to demean and insult them for their perceived poverty. While some women did not see any significant changes in their economic status, they do consider themselves better off than other women in the market engaging in different business such as selling vegetables and fruits, selling tea or working in

61 Sjoerd TM Zanen, 'Before all memories are lost: from self-sufficiency to monetization to market during the 1970s-90s; historical, economic and cultural changes in Bor District, South Sudan', Working Paper 153, African Studies Centre Leiden (ASCL), Leiden University, 2022.

62 KII, fisherwoman, Bor boatyard (Nyok-Agany), 18 March 2023.

63 Lentisco and Lee, 2015.

64 KIIs, fisherwomen, Bor Town, 19 March 2023.

restaurants.

The majority of those interviewed confirmed that engaging in the fishing sector has brought about a positive change in their economic status, showing how lucrative the fish selling businesses can be for women. As one woman, a farmer who had been displaced by floods, noted, 'This business is lucrative. The money that I get a day helps me to do a lot of things. And I have found out that no other business here in Bor can surpass it. And I am not thinking of changing this business for another.'<sup>65</sup>

While there are mixed views on the changes in social status, the economic benefits are widely recognized as transformative for women and their families in Bor. Even men acknowledged the economic benefits to women, as they can earn substantial incomes, especially with salted fish, that often exceeded those of NGO employees (who are often men) or women engaged in other businesses.

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65 KII, woman fish retailer, Bor, 18 March 2023.

# CONCLUSION

In Jonglei State, particularly in Bor Town, the shifting from pastoralism and farming to commercial fishing has created a complex web of social, cultural and economic changes within the local communities. This transformation has been driven by a confluence of factors, including climate change related flooding, insecurity and economic shocks. Fishing, once marginalized, has now become a lifeline for many, offering newfound economic opportunities and stability. This transition has not been without its challenges, however, especially for women who have taken on leading roles in their households due to conflicts and loss of husbands.

The transformation from pastoralism and farming to commercial fishing in Jonglei State has brought about significant economic opportunities, social changes and challenges. It has reshaped livelihoods, gender roles and cultural norms while offering hope and stability in the face of adversity. The fishing industry's potential for growth and its impact on women's empowerment underscore the need for careful consideration of the social and cultural dimensions in the pursuit of sustainable development in the region.

The emergence of the fishing sector as a vital source of income and sustenance underscores the resilience and adaptability of these communities in the face of adversity. It has also brought about profound social changes, altering traditional gender roles, income distribution and cultural practices. The cultural barriers and stigmas associated with fishing are gradually faded as the economic potential of the sector becomes more apparent.

Moreover, the shift towards commercial fishing has not only improved local income but has also opened doors for employment and monetary sustenance for displaced individuals, contributing significantly to the local economy. The export potential of high-quality fish has further bolstered this sector's growth, attracting customers from neighboring countries and increased domestic interest in investing in the sector.

The participation of women in the fishing industry, driven by necessity and facilitated by changing societal dynamics, reflects a broader transformation in gender roles and the empowerment of women as primary breadwinners for their households. It is crucial, however, to recognize that this shift is not solely an economic change but a complex social transformation with both positive and negative consequences. As communities continue to adapt, it is imperative to consider how this shift is impacting on communities' social fabric and individuals' cultural identity. Sustainable development strategies and policies should seek to ensure that the benefits of the fishing industry are equitably distributed while also respecting and preserving the rich cultural heritage of the region. Balancing economic growth with the preservation of traditions

remains a critical challenge for Jonglei State and similar regions undergoing such transitions.

## RECOMMENDATIONS

The interventions and strategies outlined below should be implemented comprehensively and in conjunction with one another to create an enabling environment for women's participation and empowerment in fisheries and rural livelihoods. Additionally, it's important to involve local communities, governments, NGOs and other stakeholders to ensure the success of these initiatives and promote gender equality in the sector.

- **Empower women engaged in the fishing sector:** This should involve more than just offering training programs. It requires a comprehensive understanding of women's roles within the market ecosystem. By recognizing and addressing their specific needs at various points in this ecosystem, different institutions can tailor support to ensure its appropriateness. Training initiatives for instance should be designed to align with the diverse roles that women play within the industry, as well as any future roles that they aspire to. Empowering women in the fishing sector will benefit the wider community and contribute to fostering economic growth and sustainability. A holistic approach to women's empowerment ensures that support is not only relevant to the specific needs of women in the fishing industry but also maximizes positive spillover effects on the broader community, and contribute to women's overall resilience.
- **Expand training topics offered to women:** Tailored training programs for women in fishing can help them improve their skills, efficiency and safety in their work. This can also boost their confidence and ability to take on leadership roles within the industry. To support diversification and women's resilience, topics should extend beyond women's current role in the selling of fish, and help women to explore other opportunities in the value chain. Topics offered could include the processing, packaging and transportation of fish. Building women's skills in these areas would allow them not only contribute to the economic stability of their communities but also gain a deeper understanding of the entire value chain.
- **Ensure that women's empowerment activities are culturally sensitive:** To foster gender equality and empower women in the fisheries sector, it is imperative that a culturally sensitive approach is used. Addressing cultural norms and economic structures that act as barriers to women's entry into the sector is important, however, as this will challenge deeply ingrained gender stereotypes and norms associated with the fisheries industry, it must be done in a culturally sensitive way that builds on positive social changes and emphasizes the importance of inclusivity and equal opportunities for both women and men. This will help to mitigate against negative backlash. Simultaneously, educational initiatives could highlight the key role that women play in the fishing industry, and a gender-sensitive approach to investment in fishing infrastructure should be used. When investing in infrastructure

improvements, stakeholders should carefully consider the potential impact on gender dynamics within the industry to avoid either inadvertently reinforcing traditional gender roles, or giving the impression that men are excluded. For example, upgrading processing facilities should not lead to a scenario where women predominantly take up processing jobs while men dominate marketing and higher-level decision-making roles, but rather emphasize the importance of an equitable distribution of roles at various levels between skilled and capable men **and** women.

- **Be aware of and sensitive to the social dynamics within communities:** There are diverse social dynamics at play within South Sudanese communities. In conflict-prone countries, like South Sudan, empowering women is essential, considering their pivotal role in community development. At the same time, young men in South Sudan are also seeking new economic opportunities that will allow them to positively take part in South Sudan's economic development and garner the financial resources needed to marry and support a family. Excluding or ignoring young men runs the risk of fueling their disaffection, leaving them open to manipulation and engaging in armed aggression out of frustration.

# REFERENCES

Ajak, Amb. Jwothab Amum. 'Why We Ought to be Careful with Dredging River Naam in South Sudan'. *PaanLuel Wel*, 26 September 2022. (<https://paanluelwel.com/2022/09/26/why-we-ought-to-be-careful-with-dredging-river-naam-in-south-sudan/>)

Aloo, P.; Nyandat, B.; Kibwag, J.; Murakwa, D.; Lwenya, C.; Owili, M.; Macharia, P. (2000). The Role of Women in Fisheries Management in Kenya: Financing of Women Activities in the Fisheries Sector. (<http://hdl.handle.net/1834/7170>)

Arnason, Ragnar and Marisa Kashorte. 'Commercialization of South Africa's Subsistence Fisheries? Considerations, Criteria and Approach'. *International Journal of Oceans and Oceanography* 1/1 (2006): 45-65. ([https://www.researchgate.net/publication/228770879\\_Commercialization\\_of\\_South\\_Africa's\\_subsistence\\_fisheries\\_Considerations\\_criteria\\_and\\_approach](https://www.researchgate.net/publication/228770879_Commercialization_of_South_Africa's_subsistence_fisheries_Considerations_criteria_and_approach))

Asiedu, Berchie, Pierre Failler and Yolaine Beygens. 'Ensuring food security: An analysis of the industrial smoking fishery sector of Ghana'. *Agriculture & Food Security* 7/38 (2018).

Awuou, David Majur. 'While UNMISS support has helped improve livelihoods at Bor Fish Market, more needs to be done'. UNMISS, 24 March 2022. (<https://unmiss.unmissions.org/while-unmiss-support-has-helped-improve-livelihoods-bor-fish-market-more-needs-be-done>)

Benansio, John Sebit, Johnson Jiribi Balli, Daniele Dendi, Stephanie N. Ajong, Nic Pacini, Luca Luiselli. Fish Community Composition Indicates Low Impact of Capture Efforts in the Sudd Wetlands of South Sudan'. *European Journal of Ecology* 7/2 (2021): 40-53.

BKP. 'Training on socioeconomic monitoring and analysis in fisheries in South Sudan. Final Technical Report'. Berlin: BKP Development Research and Consulting GmbH, 2013.

Burton, John W. *God's Ants: A Study of Atuat Religion*. St Augustin, West Germany: Anthropos Institute, 1981.

FAO. 'Fishing in South Sudan: a rapid assessment of the fisheries sector in Jonglei State'. Juba: FAO, 2020.

—. *The State of World Fisheries and Aquaculture 2020*. Rome: FAO, 2020. (<http://www.fao.org/3/ca9229en/CA9229EN.pdf>)



—. ‘Socio-Economic Assessment of Fisheries in South Sudan’. Juba: FAO, 2019. (<https://www.fao.org/fishery/en/facp/ssd>)

FAO. 2023. The contribution of women in small-scale fisheries to healthy food systems and sustainable livelihoods in the United Republic of Tanzania. Rome, FAO. (<https://doi.org/10.4060/cc5368en>)

FEWS NET. ‘Livelihoods Zone Map and Descriptions for the Republic of South Sudan’. November 2018. (<https://fewsn.net/east-africa/south-sudan/livelihood-zone-map/november-2018>)

Howell, Paul, Michael Lock and Stephen Cobb, eds. *The Jonglei Canal: Impact and Opportunity*. Cambridge, UK: Cambridge University Press, 1988.

IOM. ‘Gender assessment of the fisheries value chain in Jonglei State’. Juba, South Sudan: International Organization for Migration, 2017.

Janefer, Keji. ‘Dredging Sudd Wetlands could be disastrous if rushed – report’. *The City Review*, 6 July 2023. (<https://cityreviewss.com/dredging-sudd-wetlands-could-be-disastrous-if-rushed-report/>)

Kaminski, Alexander M, Sven Genschick, Alexander S Kefi, and Froukje Kruijssen. ‘Commercialization and upgrading in the aquaculture value chain in Zambia’. *Aquaculture* 493/1, (2018): 355-364. (<https://doi.org/10.1016/j.aquaculture.2017.12.010>)

Kashorte, Marisa. ‘Moving subsistence fisheries to commercial fisheries in South Africa’. United Nations University: Fisheries Training Programme, 2003. (<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=f848d116acb6148a3bfc59d6ad15ceaed608577a>)

Lentisco, Angela and Robert U Lee. ‘A review of women’s access to fish in small-scale fisheries’. *Fisheries and Aquaculture Circular* 1098, FAO, 2015.

Lucks, Dorothy and Lona Luduro. ‘Independent Terminal Evaluation: Upgrading the Fishery Sector in South Sudan’, UNIDO, Project ID 120447, 2021. ([https://www.unido.org/sites/default/files/files/2021-09/South-Sudan-120447\\_FisherySector%20TE-2020.pdf](https://www.unido.org/sites/default/files/files/2021-09/South-Sudan-120447_FisherySector%20TE-2020.pdf))

Martino, Simone, Elaine Azzopardi, Clive Fox, Emma Chiaroni, Elena Payne and Jasper Kenter. ‘The importance of local fisheries as a cultural attribute: insight from a discrete choice experiment of seafood consumers’. *Maritime Studies* 22/22 (2023). (<https://doi.org/10.1007/s40152-023-00308-2>)

Saediman, Haji, J Merlina, IS Rianse, Sitti Aida Adha Taridala and R Rosmawaty. ‘Economic returns and constraints of traditional fish smoking in North Buton District of Southeast Sulawesi’. International Conference on Agriculture, Environment and Food Security, IOP Conference Series: Earth and Environmental Science. 782 (2021). ([https://www.researchgate.net/publication/352346028\\_Economic\\_returns\\_and\\_constraints\\_of\\_traditional\\_fish\\_smoking](https://www.researchgate.net/publication/352346028_Economic_returns_and_constraints_of_traditional_fish_smoking))

[in\\_North\\_Buton\\_District\\_of\\_Southeast\\_Sulawesi\)](#)

Southern Development Investigation Team. 'Natural Resources and Development Potential in the Southern Provinces of the Sudan'. A Preliminary Report by the SDIT - 1954, London: Government of Sudan, 1955. (<https://sudanarchive.net/?a=d&d=SLPD19540000-01>)

Thomas, Edward. 'Moving Towards Markets: Cash, Commodification and Conflict in South Sudan'. Juba: Rift Valley Institute, 2019. (<https://riftvalley.net/sites/default/files/publication-documents/Moving%20towards%20markets%20oby%20Edward%20Thomas%20-%20RVI%20X-border%20Project%20%282019%29.pdf>)

Tschirley, David, Thomas Reardon, Michael Dolislager and Jason Snyder. 'The Rise of a Middle Class in East and Southern Africa: Implications for Food System Transformation'. *Journal of International Development*, 27/5 (2015): 628-646. (<https://doi.org/10.1002/jid.3107>)

UNDP. 'New Fish Storage Facility Launched in Greater Jonglei'. 2 July 2018. (<https://www.undp.org/south-sudan/press-releases/new-fish-storage-facility-launched-greater-jonglei>)

Witte, Frans, Martin de Graaf, Oliva C Mkumbo, Asim I El-Moghraby and Ferdinand A Sibbing. 'Fisheries in the Nile System'. In *The Nile*, edited by Henri J Dumont, 723-747. Berlin: Springer Dordrecht, 2009. ([https://link.springer.com/chapter/10.1007/978-1-4020-9726-3\\_34](https://link.springer.com/chapter/10.1007/978-1-4020-9726-3_34))

Zanen, Sjoerd TM. 'Before all memories are lost: from self-sufficiency to monetization to market during the 1970s-90s; historical, economic and cultural changes in Bor District, South Sudan'. Working Paper 153, African Studies Centre Leiden (ASCL), Leiden University, 2022. (<https://hdl.handle.net/1887/3281952>)





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