## Understanding the Socioeconomic Conditions of Fisherwomen in the Fish Supply Chain of Northern Andhra Pradesh



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Almaas Masood



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| Almaas Masood

#### **ABOUT THE AUTHOR:**

Almaas Masood is a freelance photojournalist and writer. She focuses on the complex relationships between economic and environmental change, human survival, and geopolitical landscapes emphasising conflicts within the maritime domain. She did her Bachelor of Arts in Political Science, Journalism, and Communicative English and a Post Graduate Diploma in Multimedia Journalism. She has worked with Reuters, Mongabay, and BBC, among others.

#### ABSTRACT

The Indian fishing industry is a rapidly growing sector, with Andhra Pradesh contributing significantly to it. The paper shows the crucial link the fisherwomen of Andhra Pradesh play in the supply chain within this industry. The paper covers the challenges women face in post-harvest fishing tasks across three landing centres in Northern Andhra Pradesh. It also identifies opportunities to enhance the income and working conditions of the fisherwomen within this informal system. Improving infrastructure design, acknowledging fisherwomen as active contributors, and providing comprehensive financial and digital literacy training modules would benefit the fishing sector.



Figure 1. One day before the annual fishing ban commenced on the East Coast of India. 14 April, 2023

## INTRODUCTION

Women shoulder significant responsibilities in both pre-harvest and post-harvest fishing tasks. Despite their pivotal role, their contributions remain largely unnoticed and undervalued within the fishing industry. While the common perception of the fishing industry often revolves around men on sea expeditions, it's essential to recognise women's important link in the supply chain. They play a critical role in ensuring the seamless delivery of seafood to consumers, especially considering the perishable nature of these products.

Once the fish is brought to shore, the post-harvest tasks such as auctioning the fish, transporting catch from fish-landing centres to local markets, processing, drying, marketing, and selling of fish are carried out by women. Chicken and shrimp feed industries also rely on women to procure their primary raw materials in Andhra Pradesh. However, women encounter significant socio-economic challenges in their daily lives within this industry.

## MAPPING ANDHRA PRADESH'S COASTAL ANCHORS

The study area for this research was across three fish landing centres in the Southeast coastal state of Andhra Pradesh (AP), in India.

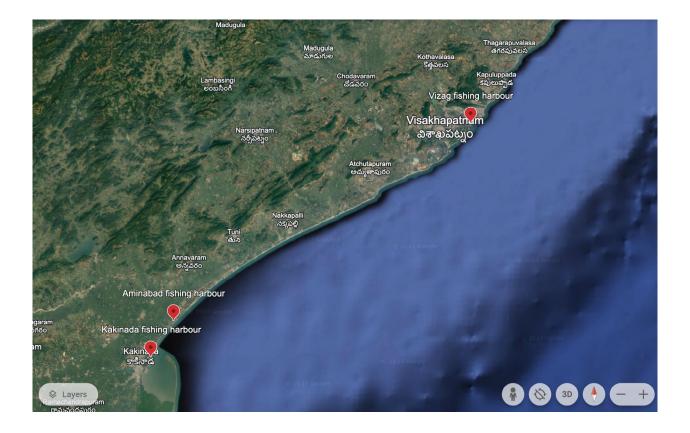


Figure 2. Case study sites indicating survey villages of fish landing centres in Andhra Pradesh. / Google Earth

India is the third largest fish-producing country, contributing eight per cent to global fish production. The fish production in 2021-22 was 16.24 million tonnes, comprising marine fish production of 4.12 million tonnes. India also exported 73679 metric tonnes of dried fish worth INR 1472.98 crores (Fisheries Statistics Division, 2022).

India's seafood exports soared to unprecedented levels in the fiscal year 2022-23, marking a historical pinnacle in both volume and value. During this period, the country shipped a staggering 1.7 lakh tonnes of seafood, valued at Rs 63,969.14 crore (\$8.09 billion). This achievement reflects a substantial growth of 26.73% in quantity and 4.31% in value compared to the previous financial year of 2021-22.

Andhra Pradesh has a coastline of 974 km, with nine coastal districts, of which 555 are fishing villages and 351 landing centres. The state has 4,61,712 male fishers and 4,13,125 female fishers in the marine fishing sector as of 2020-2021 (Fisheries Statistics Division, 2022) It

comprises 53% male and 47% female fishers in the state. The contribution of the fisheries sector is 6.01 % of the State GSDP, whereas the fisheries contribution is 0.83% of the nation's GDP (Jeyalakshmi & Rao, 2021, d549).

The research was conducted in two of the nine coastal districts across three landing centres in Visakhapatnam and Kakinada, representing North Andhra and the East Godavari region. The region spanning 152 km apart has 28% of the fisher villages of the state.

Number of	Visakhapatnam	East Godavari
Fishing villages	63	97
Fisher households	28779	44476
Male fishers	37497	51357
Female fishers	36161	51900
Children	39974	61951

#### Table 1: Demographics of districts

(Jeyalakshmi & Rao, 2021, d555)

The study encompasses documentation of three distinct landing centres:

- 1. Visakhapatnam Fishing Harbour (Vizag Fishing Harbour): This serves as one of Andhra Pradesh's four major fishing harbours, playing a significant role in the region's fishing activities.
- 2. Kakinada Fishing Harbour: Located in the East Godavari region, this centre, although relatively minor, holds importance in the fishing operations of Andhra Pradesh.
- 3. Aminabad Fishing Harbour in Uppada: Currently in its construction phase, this harbour in Uppada is being developed and poised to become an essential asset in the region's fishing infrastructure.

However, the challenges faced to a certain extent in the state include meeting requirements of cold-chain facilities, fish landing centre's infrastructure, and post-harvest infrastructure (Ministry of Fisheries, Animal Husbandry & Dairying, 2023).

## ROLES OF FISHERWOMEN IN ANDHRA PRADESH'S FISHING INDUSTRY

The fisherwomen link producers and consumers. With men away at sea, the women contribute highly to the fast-growing fishing sector and are the sole household managers of their families. However, the fisherwomen have always faced marginalisation and invisibility.

#### **1. Conducting Auctions**

Most women auctioneers lend money to boat owners so they can use their boats' catches as auction items. They either conduct fixed-wage auctions or serve as auctioneers for their own boats' catch (Kalavathy, 1985). She does not involve herself in marketing fish.



Figure 3. A security watchtower of Vizag port is visible in the background while a fisherwoman takes stock of fish to auction it amidst middlemen who have come to purchase fish on behalf of large commercial companies.



Figure 4. An auctioneer shows the day's catch to a buyer who refuses to purchase it at Kakinada's fishing harbour.

#### 2. Processing

Women engage in cleaning and grading of stock at landing centres. Either merchants employ them to process it, or they sell it to other fisherwomen-retailers to be taken to local markets. The stock includes various fish, shrimps, and other consumable fish produce.



Figure 5. Fisherwomen cleaning fish and shrimps at a shed in Kakinada fishing harbour. They sort and clean (process) the stock by the crate. They get paid per crate they process.



Figure 6. Fisherwomen cleaning freshly caught shrimp at Kakinada's fishing harbour. The fisherwomen are either employed by a middleman to process shrimp, or they sell the processed shrimp to merchants.

#### 3. Trade and enterprise

Small-scale fishers and their families rely on this system of retail. The women purchase fish from landing centres and transport it by themselves to sell in local markets. They purchase it from other women auctioneers or the large boats that arrive with fresh catch. The burden of packing and transporting the stock is on the women themselves. This is undertaken to support their families and to generate income. This form of re-selling is mostly relied on by older widowed fisherwomen, who do not have access to the sea anymore owing to their husband's deaths.



Figure 7. A fisherwoman collecting fish from a boat after it returned from a fishing expedition at Kakinada fishing harbour.



Figure 8. Women eagerly wait for a boat to dock to collect fish from it on the last day of East Coast's fishing season on Aminabad harbour. They then sell it at local markets.

#### 4. Fish drying and selling

Fish drying involves various steps before the sale takes place. The women sort and grade the fish, clean it and then salt it. It is then laid out in the sun in a traditional method before it is ready. They then store it till it is sold to merchants and at local markets.



Figure 9. The shores at Aminabad harbour are dotted with fisherwomen in make-shift huts curing, salting, and drying different types of fish



Figure 10. Women sell dry fish at an open space inside Vizag fishing harbour. The area is also used for vehicles to pass through. This keeps the women and products open to various climatic conditions.

#### 5. Gleaning

Some fishing methods involve dragging heavy nets across the seafloor to catch fish. These types capture everything, including deep-sea corals, sponge beds and non-target species such as rays and juvenile fish. The women collect the leftovers of such nets, process them, and then supply them to the chicken feed industry.



Figure 11(a). Women collect leftovers from fishing nets in a process called gleaning. This is then processed to various grades and supplied to chicken feed industries.



Figure 11(b). Women collect leftovers from fishing nets in a process called gleaning. This is then processed to various grades and sold to chicken feed industries.

## KEY CHALLENGES FACED BY FISHERWOMEN IN ANDHRA PRADESH

The political landscape in Andhra Pradesh is deeply rooted in a caste-based structure, raising significant questions about the position of fisherwomen within this societal framework. In an environment already rife with gender biases, marine fisherwomen in AP find themselves situated at the lowest rung of the social hierarchy.

They primarily belong to four fisher castes;

- Odda (Vada) Balija (BC-A)
- Jallari (BC-A)
- Pattapu (BC-A)
- Agnikula Kshatriya (Palli). (BC-A)

These castes are categorised as Backward Classes (BC) by the Government of Andhra Pradesh. BC-A includes castes and communities who are socially and educationally disadvantaged and are economically weaker among the OBCs. Even today, fishing is considered a low-status occupation in society. Moreover, 90% of fishers in Andhra Pradesh lie below the poverty line (Jacob & Rao, 2016).

In the economic realm, women in Andhra Pradesh encounter restricted access to marketplaces, with their entry often contingent upon factors such as age and marital status. Additionally, they confront hurdles in establishing fair prices due to the dominance of middlemen, who belong to 'upper castes' or occupy more privileged social positions.



Figure 12. A middleman directing a group of fisherwomen to collect fish from boats which arrived on the last day of fishing season at Aminabad harbour

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Often, the women rely on an informal credit system due to its accessibility and ease, albeit at high-interestrates, which are regulated by lenders belonging to 'upper castes' or having political influence.

An informal money lending system has been established in coastal Andhra Pradesh, but it has recently taken a distressing turn. Reports, such as one cited in Business Standard (Sarma, 2015), highlighted a disturbing trend where Gautam Sawang, the former Director General of Police of Andhra Pradesh, and his team noted a surge in complaints involving severe forms of abuse and harassment by money lenders. These complaints, numbering 348 related to 'call money,' indicated instances of torture, including sexual harassment, with 65% of cases involving female borrowers. Notably, the majority of these complaints originated from the coastal districts of Andhra Pradesh. Troublingly, many of the accused individuals implicated in these incidents were either affiliated with political parties or held connections to influential politicians.

Apart from fisherwomen grappling with political and economic issues, they also face various social problems, including illiteracy, malnutrition, age discrimination, poor health and extreme working conditions.



Figure 13. Kameshwari sits in her makeshift hut, where she stores dried fish that are ready to be sold. She has to walk towards the main road, away from the shore and the hut, to fill her plastic bottle with water from the only available water tank at Aminabad harbour. Kameshwari is not wearing jewellery, which either indicates a gold mortgage or her marital status. The fisherwomen transport multiple loads of fish as heavy as 35-40 kg from the coast or harbours to the closest marketplaces (Biswas & Rao, 2014). The women bear the weight of the fish on their heads, which puts strain on their bodies, particularly on their backs. Fisherwomen often confront various health risks, including ailments such as fever, cholera, and diarrhoea, as part of their occupational hazards. Nutrition plays a pivotal role in their health, yet a prevalent issue among fisherwomen across India is the widespread experience of malnutrition and nutritional imbalances. They also face superstitions that prohibit them from boarding boats and are limited to working on shores due to societal beliefs about omens or luck.

As per Section 108 of the Indian Evidence Act (1872), the burden of proving that a person who has not been heard of for seven years is alive shifts to the person who affirms the claim. When a fisherman goes missing at sea, the community presumes that he has most likely died at sea. In such a case, his wife is considered a widow by society and is subjected to differential treatment. However, as per the Act, she is eligible for the state's financial assistance for widows only after seven years. Additionally, young widows are prevented from participating in market activities based on societal norms. They rely on the central government's scheme, MGNREGA, which guarantees 100 working days, or resort to working as daily wage factory workers to support their children.

As of December 2022, only 25 claims were filed by the deceased fisher's family for the state's financial assistance in the year 2022-2023 (Planning Department, Government of Andhra Pradesh). Meanwhile, there have been increased reports of missing fishers as cyclones have increased on the east coast.

Technologically, tools and advancements fail to consider women as primary users, which results in inadequate infrastructure and a dependence on outdated methods. The infrastructure provided for post-harvest tasks lacks basic amenities to support women workers and make their workflow efficient. They are unhygienic, lack access to clean drinking water, have no designated space, and the harbours are not designed while keeping women and the nature of their work in mind. There is tough competition among women over little available space at landing centres and shores.



Figure 14. Heaps of fish put out to cure and dry at Aminabad fishing harbour.

The fisherwomen also miss out on government schemes due to inaccuracies in official documents, such as names, dates of birth, or addresses on identification cards (Adhaar card). Furthermore, issues that worsen the problem include overfishing and the effects of climate change on the fisheries sector. Due to climate change, the fisherwomen's livelihood is impacted by depleting stocks and irregular working days. Fisherwomen are forced to look for work in factories or settle for roles without social security or safety measures and are underpaid.

# Table 2: An overview of Central and State governmentschemes available to fishers of AP

(Anuradha et al., 2022)

Sahama	Awareness	Utilization
Scheme	(%)	(%)
PM Matsya Sampada Yojana	25.51	26.90
PM Matsya Sampada Yojana	16.72	16.55
YSR Matsyakara Nestham	89.66	54.31
YSR Matsyakara Bharosa	95.86	39.83
Fishermen Pension	99.66	54.14
YSR Rythu Bharosa Kendralu	97.93	16.55
YSR Bima	81.38	25.00
Diesel Subsidy to Fishermen Boats	83.46	14.48
Assistance to Retail Fish marketing by supply of Cycle with Nets and Ice boxes	87.58	6.21
Supply of two wheelers with ice box/ Freezer mounted Mopeds for fish vending/ two wheelers with ice box for shrimp seed transport	33.96	5.52
Assistance to Retail Fish marketing by supply of Three Wheelers with Ice boxes	91.72	5.34
Assistance to Retail Fish marketing by supply of Four Wheelers with Ice boxes	64.31	100.00
Supply of Ice boxes to Fishers	96.87	8.28
Assistance for Establishment of Fish retail Kiosk	62.59	6.21
Supply of Fish seed transport vans	70.69	0.17

Several factors, such as lack of knowledge, illiteracy, awareness programmes by Government officials, and ignorance, can be attributed to the low utilisation rate of the fisherwomen for the majority of the schemes in Andhra Pradesh. Another major constraint in the study is that very few schemes directly benefit fisherwomen, while the remaining schemes are male-centric. Few state-level programmes are women-friendly, but awareness and utilisation are limited. (Anuradha et al. 2022 b)

## RECOMMENDATIONS

Suggestions and actionable items to address challenges faced by fisherwomen of AP that align with the SDGs

- Implement policies acknowledging fisherwomen as active contributors, ensuring fair market access and product pricing.
- Establish direct market connections for fisherwomen, bypassing exploitative intermediaries. Encourage the establishment of women-led cooperatives or collectives to formalise their work and access resources collectively.
- Offer tailored training programs for fisherwomen on financial literacy, leadership skills, technology use, and sustainable fishing and storage practices. This addresses castebased disparities and boosts their business. It also reduces dependency solely on fishing and buffers against climate and market-related shocks.
- Invest in infrastructure such as storage facilities, processing units, washrooms, and marketplaces for fisherwomen. This targets women's health and easy navigation, streamlining the post-harvesting section and further enhancing the fishing sector.
- Develop and introduce technology designed to keep fisherwomen as users in mind to enhance productivity, efficiency, and safety in their work. Ensure that these tools are user-friendly and easily accessible in Telugu.
- Annual sessions offer legal assistance to correct errors in official documents such as Aadhaar cards, biometric cards, and other documents, ensuring fisherwomen have accurate and valid identification for accessing government schemes and services.

#### CONCLUSION

The challenges fisherwomen face in Andhra Pradesh span various dimensions—social, economic, political, technological, legal, environmental, and cultural—resulting in their systemic marginalisation in the fishing industry. While both central and state governments are investing in the blue economy through initiatives like Act East India, Maritime Vision 2030, and Pradhan Mantri Matsya Sampada Yojana, the significant role of women in coastal communities often gets sidelined.

Fisherwomen in Andhra Pradesh grapple with entrenched caste-based and gender-biased societal structures, limiting their access to marketplaces, fair pricing, and active participation due to societal norms and superstitions. Moreover, technological advancements often over-look their specific needs, while legal complexities further impede their access to government schemes and rights. Environmental factors like climate impact, overfishing, and inadequate infrastructure exacerbate their challenges, pushing them into exploitative work environments during fishing bans devoid of essential social security measures.

This intricate web of issues underscores the pressing need for comprehensive policies addressing the socio-economic empowerment, legal rights, technological inclusivity, and environmental sustainability of fisherwomen in Andhra Pradesh. Targeted interventions in pre and post-harvest sectors, including the development of supportive infrastructures and inclusive initiatives, are essential to acknowledge and uplift these women's indispensable roles in the fishing sector and their communities. Their full and inclusive participation stands as a cornerstone for the long-term sustainability of the fishing industry. There is a significant opportunity to improve livelihoods and ensure the rights and dignity of fisherwomen. This will positively impact the growing fishing industry.

### **BIBLIOGRAPHY**

- Anuradha, C. H., Devi, U. M., Mohan, K. V. & Upendra, B. (2022). Awareness and utilization of federal & state government fisherwomen empowerment schemes - A study in coastal villages of Andhra Pradesh, India. *Special Education*, 2(43), 2015. http:// sumc.lt/index.php/se/article/view/1693/1267
- Biswas, M. P. & Rao, M. R. M. (2014). Fisherwomen of the East Coastal India: A Study. *International Journal of Gender and Women's Studies*, *2*(2), 304. https://www. researchgate.net/profile/Manju-Biswas-2/publication/361636765\_Fisherwomen\_of\_the\_East\_Coastal\_India\_A\_Study/links/62bd661c88d96f1e6b2f0a51/Fisherwomen-of-the-East-Coastal-India-A-Study.pdf?\_sg%5B0%5D=started\_experiment\_ milestone&origin=journalDetail
- Fisheries Statistics Division. (2022). *Handbook on fisheries statistics.* Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying. https://dof.gov.in/sites/default/files/2023-08/HandbookFisheriesStatistics19012023. pdf.
- Indian Evidence Act, Section 108, (1872). https://lddashboard.legislative.gov.in/sites/de-fault/files/A1872-01.pdf
- Jacob, M. J. K. & Rao, P. B. (2016). Socio-ecological studies on marine fishing villages in the selective south coastal districts of Andhra Pradesh. *Ecotoxicology and Environmental Safety, 134*(2), 71. <u>https://doi.org/10.1016/j.ecoenv.2015.08.026</u>
- Jeyalakshmi, R. & Rao, P. V. (2021, September 9). Marine fishermen in Andhra Pradesh: An analysis. *International Journal of Creative Research Thoughts* (IJCRT). *9*(9) <u>https://ijcrt.org/papers/IJCRT2109391.pdf</u>
- Kalavathy, M. H. (1985). *The organising of fish marketing in Madras fishing harbour*. Food and Agriculture Organization of the United Nations. <u>https://www.fao.org/3/ae107e/ ae107e.pdf</u>
- Ministry of Fisheries, Animal Husbandry & Dairying. (2023, March 24). <u>https://pib.gov.in/</u> PressReleaselframePage.aspx?PRID=1910415
- Planning Department. (2022-2023). *Socio economic survey*. Government of Andhra Pradesh. https://apfinance.gov.in/downloads/FINALBOOKSES-2023FINAL.pdf
- Sarma, S. (2015, December 21). The story behind Andhra's call money racket. *Business Standard*. https://www.business-standard.com/article/current-affairs/the-story-be-hind-andhra-s-call-money-racket-115122100012\_1.html





