

**TITLE: FISH INNOVATION & BUSINESS  
VISIABILITY**

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**PROGRAM TITLE: SY BSC SEM – III**

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**MONTH OF SUBMISSION: SEPTEMBER 2025**



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**RIZVI COLLEGE**  
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## ZOOLOGY DEPARTMENT

### CERTIFICATE

I hereby certify that Mr. **Yadav Raj**, Student of Rizvi College of Arts, Science and Commerce, studying in SY BSC (Zoology) has completed a project titled **Fish Innovation & Business Viability** in the area of specialization for the academic year 2025-2026. To the best of my knowledge the work of the student is original and the information included in the project is correct.

Internal Guide

Head of the Department

Principal

## DECLARATION

I, Mr. **Yadav Raj**, Student of Rizvi College of Arts, Science and Commerce, studying in SY BSC (Zoology) hereby declare that I have completed the field project entitled **Fish Innovation & Business Viability** during the academic year 2025-2026. The report work is original and the information/data included in the report is true emerging from the primary and/ secondary data gathered and analyzed as part of this project. Due credit is extended on the work of Literature/Secondary Survey by endorsing it in the Bibliography as per prescribed format.

Signature of the Student with Date

Name of Student

## ACKNOWLEDGEMENT

I am highly indebted to Rizvi college of Art, Science, and Commerce, Bandra (West) for their guidance and constant supervision, as well as for providing necessary information regarding the project and also for their support in completing the project.

I would like to express my gratitude toward my parents and my mentor **Khan Humaira Ubaidurrahman** one for their kind Co-operation and encouragement, which help me in completion of this project.

I would like to express my special gratitude and thanks to my friends for giving me such attention and time.

My thanks and appreciation also go to my colleague is developing the project and people who have wiling helped me out with their abilities.

sincerely thank the Department of Zoology, Head of the department **Dr. Rana Ansariya** for their valuable guidance and support throughout this survey. Their encouragement made this study possible and meaningful.

## **ABSTRACT**

The fisheries sector is undergoing a transformative shift where innovation and business visibility work hand in hand to ensure sustainability, competitiveness, and resilience. Innovation is no longer limited to maximizing catch but now encompasses improving environmental sustainability, enhancing product quality, and adapting to challenges such as climate change, overfishing, and shifting consumer demands. Key areas include precision aquaculture with AI-based monitoring, sustainable fishing gear, advanced processing using Industry 4.0 technologies, and blockchain-enabled supply chain traceability. These innovations optimize efficiency, reduce waste, improve food safety, and create opportunities for small-scale producers.

In conclusion, the convergence of innovation and visibility provides a pathway toward a sustainable, inclusive, and competitive fisheries sector. By integrating advanced technologies with transparent business practices and local community engagement, fisheries can evolve into resilient systems that balance economic growth, environmental health, and social inclusion.

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## CHAPTER. 1 INTRODUCTION

In the fisheries sector, innovation is the strategic process of developing and implementing new ideas, technologies, and practices to improve sustainability, efficiency, and competitiveness. Business visibility is the degree to which a company's operations and brand are transparent and accessible to stakeholders, including customers, investors, and partners. Together, these concepts are crucial for navigating the challenges and opportunities of a modern, globalized seafood industry.

### Introduction to innovation in the fisheries sector

Innovation in fisheries is moving beyond maximizing catch to focusing on quality, ocean health, and sustainability. It involves transforming traditional methods to address pressures from overfishing, climate change, and evolving consumer demands. Key areas of innovation include

1. **Technology:** Tools like automation, sensors, drones, and AI are used to monitor fish stocks, optimize feeding, and improve water quality.
2. **Products and processing:** New products and high-value items, such as medical products from fish skin, can be developed.
3. **Aquaculture:** Innovations like recirculating aquaculture systems (RAS) and integrated multi-trophic aquaculture (IMTA) are making fish farming more sustainable and efficient.
4. **Sustainability practices:** New technologies are developed to reduce bycatch and minimize environmental impacts.
5. **Business models:** Innovative models, like online fishmongers that connect small-scale fishers directly with consumers, can improve profitability and sustainability.



## Introduction to business visibility in the fisheries sector

For fish businesses, visibility is about creating a clear, recognizable, and trustworthy brand. This involves using strategic marketing and transparent business practices to connect with the modern consumer, who increasingly cares about a product's origin and ethical background.

Key elements of enhancing business visibility include

1. **Building a strong online presence:** Using social media platforms like Instagram and Facebook to share high-quality images and engaging stories about fishing spots, processes, and products builds a community around the brand.
2. **Ensuring traceability and transparency:** Consumers want to know where their seafood comes from. Using technologies like blockchain to provide end-to-end tracking from "boat to plate" can build trust and brand reputation.



3. **Leveraging content marketing:** Creating informative content, such as blog posts or videos, can position a business as an expert in the field. This helps attract organic traffic and fosters customer engagement.

4. **Collaborating with stakeholders:** Partnering with local chefs, other businesses, and influencers helps expand

market reach through cross-promotion.

5. **Optimizing for search engines (SEO):** Incorporating relevant keywords helps a business appear higher in search results, increasing its discoverability by potential customers.



### **The connection between fish innovation and business visibility**

For fisheries businesses to thrive, innovation and visibility must be pursued together. The link is symbiotic:

1. **Innovation provides a compelling story:** Businesses that use sustainable technology, improve product quality, or adopt transparent supply chains have a powerful story to tell. This is a primary marketing message that boosts their visibility and credibility.
2. **Visibility drives adoption of innovation:** A visible, recognized brand can more easily introduce and gain market acceptance for its innovative products and methods. This helps to secure growth and attract investment.

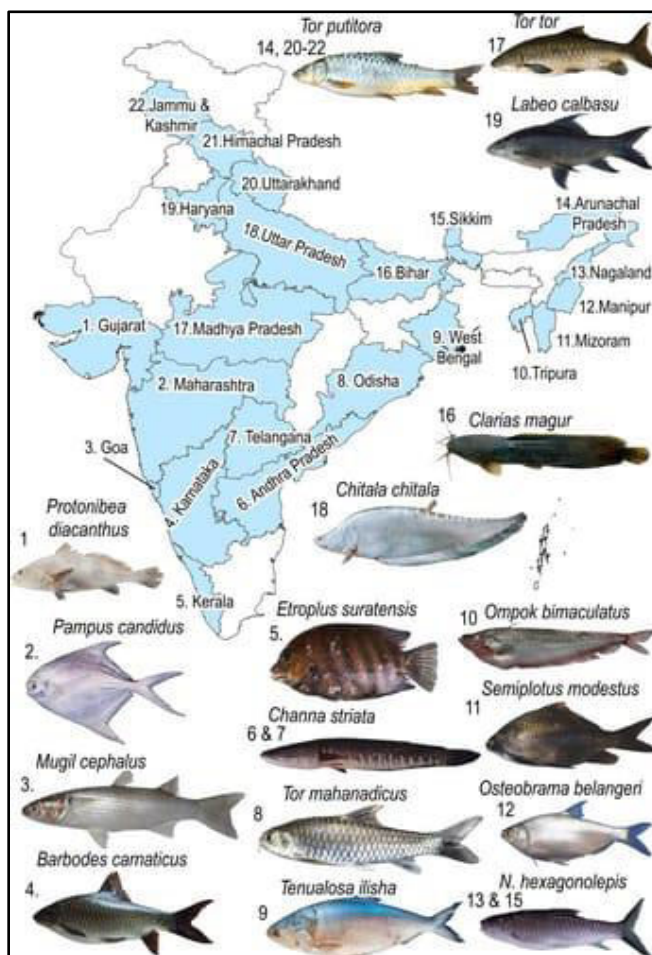
## CHAPTER 2. LITERATURE REVIEW

Fish innovation involves advancing aquaculture (e.g., closed systems, precision farming) and improving processing (e.g., Industry 4.0 technologies, novel preservation methods) and fishing (e.g., precision sonar, selective gears) to enhance productivity and sustainability. Business visibility is gained through supply chain technologies, including blockchain and IoT for transparency and traceability, but faces challenges from inadequate processes, communication gaps, and insufficient metrics for monitoring and decision-making.

### # Innovations in the Fish Industry

#### Aquaculture

1. **Precision Aquaculture:** Utilizing sensors, data analytics, and AI to optimize fish health, feeding, and water quality, leading to enhanced productivity and sustainability.
2. **Advanced Technologies:** Implementing automated feeding systems, biofloc technology, and closed-system farming to improve efficiency and address environmental challenges.
3. **Disease Prevention:** Employing probiotics, RNA interference, and cleaner fish to reduce disease prevalence and reliance on antibiotics.



## **Fisheries**

1. **Precision Fishing:** Using sonar and GPS to precisely locate schools of fish, significantly reducing search times and improving catch rates.
2. **Sustainable Gears:** Developing innovative fishing gear modifications, such as tie-down gillnets, to reduce discards, bycatch, and promote more selective and sustainable fishing practices.

## **Traceability / supply-chain visibility (Academic + NGO)**

- **Sara G. Lewis & Mariah Boyle** — influential review of seafood traceability tools and initiatives (FishWise background).
- **Marah J. Hardt, Keith Flett & Colleen J. Howell** — work on barriers to interoperability of digital traceability systems in seafood.
- **Gilles Hosch, Francisco Blaha & Victoria Chomo (FAO)** — FAO technical work on seafood traceability and compliance.
- **Researchers studying blockchain traceability pilots (multiple teams)** — e.g., Bai et al. and several teams reviewing blockchain for sustainable seafood. (Recent syntheses and case studies).

## **Blockchain + IoT for Fish supply chains**

- **Shereen Ismail, Hassan Reza, Khoulood Salameh, Hossein Kashani Zadeh, Fartash Vasefi** — "Toward an Intelligent Blockchain IoT-Enabled Fish Supply Chain" (review + conceptual framework).

## **Precision aquaculture / production-side innovation**

- **F. Antonucci & C. Costa** — reviews of engineering innovations in precision aquaculture (sensors, computer vision, decision tools).

- **Multiple AI/automation reviewers (authors of AI-driven aquaculture reviews)** — syntheses of AI, sensors and decision support in aquaculture.

#### **Broader innovation / development & policy studies**

- **Authors of "How is innovation in aquaculture conceptualized and managed?"** — systematic analyses of innovation approaches in aquaculture (see literature reviews).
- **Frontiers / FAO / WWF / FishWise / industry consortia** — these organisations produce policy reports and applied research that connect innovation to market access and visibility (e.g., WWF blockchain pilot, FishWise guidance).

#### **Key institutions and research hubs you'll often see in this literature**

- FAO (Food and Agriculture Organization), FishWise, WWF, national research institutes (e.g., NOAA, Nofima), and universities active in aquaculture/food systems research (e.g., Wageningen University, University of Stirling, University of North Dakota).

## CHAPTER 3. METHODOLOGY

Methodology for fish innovation and business visibility isn't a single established model but a multi-faceted approach integrating technological advancements, business model innovation, and supply chain transparency to improve efficiency and market access. Key elements include digital innovations like AI-powered monitoring, process improvements such as automated processing and blockchain-based traceability, and the creation of differentiated business models (e.g., labeling high-quality, sustainable products) to build trust and value. Implementing these innovations requires a focus on data infrastructure, business development services, and creating enabling environments for adoption.

### **Technological Innovations for Production & Monitoring**

1. **Aquaculture Automation:** AI and internet-enabled systems like UMITRON LENS automate fish measurements, tracking growth cycles, and providing real-time data to improve farming efficiency and reduce stress on fish.
2. **Precision Aquaculture:** Advances in sensing technologies and data analytics help optimize water quality (salinity, temperature) and nutrient inputs, leading to better fish health and growth.
3. **Innovative Gear:** Developing new, sustainable fishing gear and modifying existing equipment, like mesh size and orientation, aims to improve selectivity and reduce bycatch.

### **Innovation in Processing & Supply Chain**

1. **Industry 4.0 & Automation:** Applying automation, AI, sensors, and computer vision in processing helps identify and eliminate defects, enhancing product quality, shelf life, and value.
2. **Blockchain for Transparency:** Using blockchain technology provides a secure, transparent, and traceable record of fish products from farm to table, combating fraud, mislabeling, and improving food safety.

3. **ICT & AI Integration:** Information and communication technologies, along with artificial intelligence, can strengthen both forward (producer to consumer) and backward (supplier to producer) linkages in the supply chain, creating better market access and reducing losses.

#### **Business Model Innovation & Market Visibility**

1. **Product Differentiation:** Creating unique labels for specific fishing methods or quality standards, such as the association of small-scale fishers in Brittany with their line-caught sea bass, establishes a premium brand and price point.
2. **Institutional Innovation:** Supporting cooperatives and producer associations can help fishermen achieve economies of scale, gain better market access, and access technology.
3. **Digital Platforms:** Developing digital platforms for data collection and sharing creates market intelligence and helps connect producers with consumers, bridging knowledge gaps and facilitating trade.

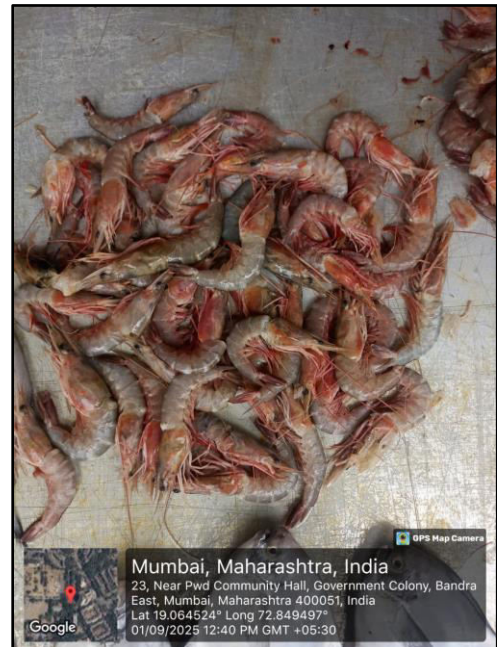
## Fish & Prawn Recipe:

### 1. Prawn Recipe

**Recipe Name:** Prawn Skewers

**Ingredients:**

- a. Juice of 1 lime
- b. 1 tbsp finely chopped garlic
- c. 1 tbsp finely chopped coriander leaves
- d. 1 tsp Kashmiri chili powder
- e.  $\frac{1}{2}$  tsp turmeric powder
- f. 1 tbsp cornstarch
- g.  $\frac{1}{2}$  tsp crushed pepper
- h. 2 tbsp olive oil
- i. Salt to taste
- j. 250 g prawns (cleaned and deveined)



**Preparation Steps:**

- a. In a mixing bowl, add lime juice, garlic, coriander leaves, chili powder, turmeric powder, cornstarch, crushed pepper, olive oil and salt
- b. Mix all ingredients well to form a marinade.
- c. Add the cleaned prawns into the marinade and coat them evenly.
- d. Insert the prawns onto skewers.
- e. Heat a pan, add 2 tbsp butter + 1 tbsp oil, and coat the pan evenly.
- f. Place the skewered prawns on the pan and cook on medium heat until prawns turn pink and slightly golden (about 5–6 minutes).
- g. Serve hot with chutney or dip of choice.



**Project Notes:**

- a. Prep Time: 15 minutes
- b. Cooking Time: 6–8 minutes
- c. Servings: 2–3 persons
- d. Kashmiri chili gives bright red color but less spiciness.
- e. Cornstarch helps to coat prawns and gives a crispy texture.
- f. Skewers can also be grilled instead of pan-fried for smoky flavor.

**2. Fish Recipe**

**Recipe Name:** Pomfret Fry

**Ingredients:**

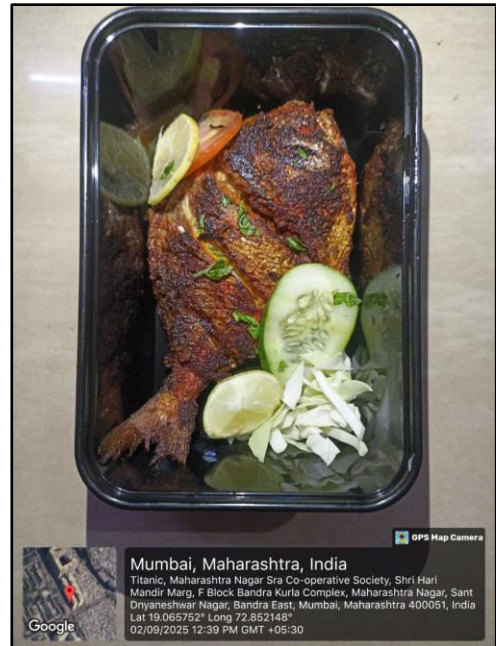
- a. 1 bulb garlic (peeled)
- b. 3 green chilies
- c. 1 tsp cumin (jeera)
- d. 1 tsp red chili powder
- e. ½ tsp cumin powder
- f. 1 tsp turmeric powder
- g. ¼ tsp pepper powder
- h. 1 tsp coriander powder
- i. 1 tsp salt
- j. 2–3 pomfret fish (cleaned and washed)
- k. Oil for shallow frying

**Preparation Steps:**

- a. Make the Base Paste: Grind garlic, green chilies, and cumin together to make a fine paste.
- b. Add Spices: Mix the paste with red chili powder, cumin powder, turmeric powder, pepper powder, coriander powder, and salt. Add a little water if needed to form a smooth marinade.



- c. Marinate Fish: Coat the cleaned pomfret fish evenly with the prepared masala paste. Let it rest for at least 20–30 minutes so the flavors absorb well.
- d. Fry the Fish: Heat oil in a pan on medium flame. Shallow fry the marinated pomfrets on both sides until golden brown and crispy.
- e. Serve: Serve hot with lemon wedges and onion slices.



### Project Notes:

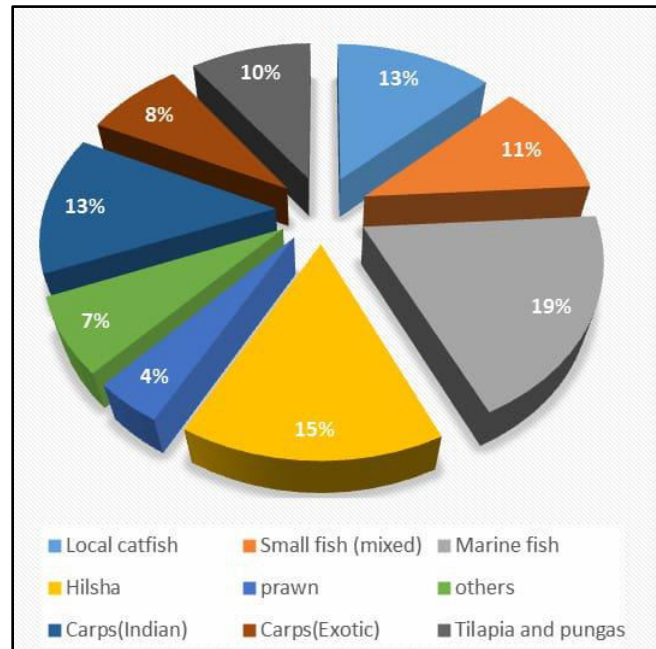
- a. Prep Time: 20 minutes (excluding marination)
- b. Cooking Time: 10–12 minutes
- c. Servings: 2–3 persons
- d. Pomfret has delicate flesh, so avoid overcooking.
- e. Can be served as a starter or with rice and curry.

## CHAPTER 4. DATA ANALYSIS

Data analysis for the Bandra East fish market requires looking at specific factors like price trends for various fish species, seasonal availability, consumer purchasing habits (e.g., home delivery growth), and the influence of wholesalers and local Koli community networks. While general fish market data from other regions provides context on pricing and seasonality, specific, localized data for Bandra East isn't readily available in the search results.

### Key Data Points for Analysis

1. **Fish Species and Pricing:** Track the daily/weekly prices of popular fish like Silver Pomfret, Indian Mackerel, Prawns, and Shrimp.
2. **Seasonality:** Analyze fish availability throughout the year, noting increases in captured fish during the rainy season and farmed fish in winter.
3. **Supply Chain:** Map the flow of fish from catch to market, including the role of wholesalers, retailers, and intermediaries.
4. **Consumer Behavior:** Observe shifts in purchasing patterns, such as the rise of home delivery services for raw fish and increased demand for specific species.



### Challenges in Data Analysis

1. **Lack of Specific Data:** Publicly available data often covers broader regions, not specific local markets like Bandra East.

2. **Dominance of Intermediaries:** Wholesalers have a significant influence, which can affect price stability and availability.

### Steps for a Deeper Analysis

1. **Market Observation:** Conduct direct observations at the Bandra East fish market to collect price, variety, and supply data.
2. **Interviews:** Speak with local fish vendors, wholesalers, and Koli community members to gain insights into market dynamics and traditional practices.
3. **Data from Local Platforms:** Utilize local business directories like Justdial to identify key wholesalers, retailers, and their potential customer bases.
4. **Government Data:** Check for data from sources like the National Fisheries Development Board (NFDB) and the International Collective in Support of Fish workers (ICSF) for broader trends in Indian fisheries.

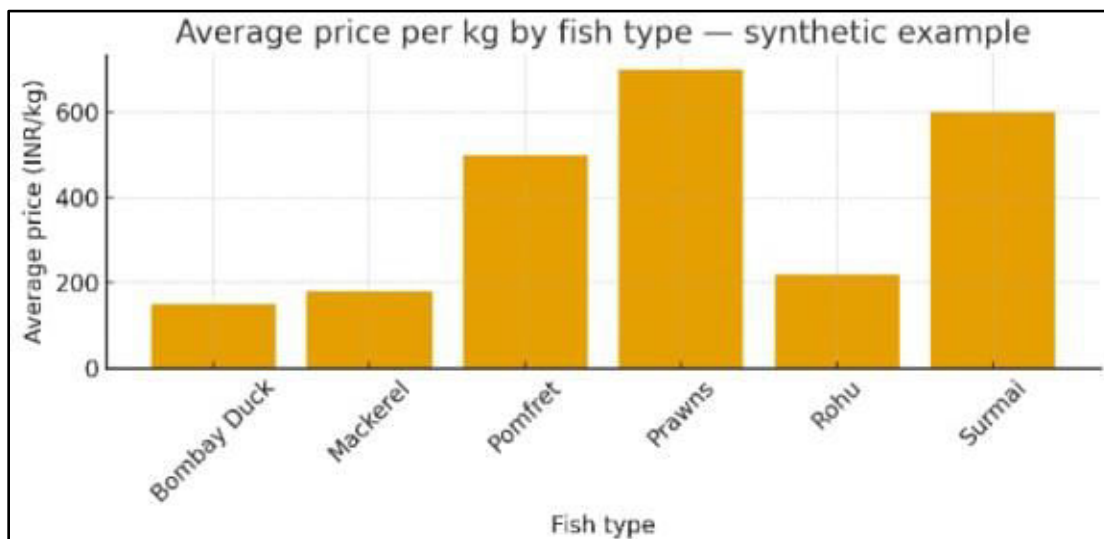
Specific, current data for the Bandra East fish market is limited in the provided search results; however, analysis of general Maharashtra fish markets indicates inland species like Catla, Rohu, and Tilapia are prominent due to local consumption and taste preferences. Marine fish like Pomfret and Mackerel are also significant, though prices and demand fluctuate seasonally, with prices generally highest in summer and lowest in winter. Factors influencing prices and availability include species, size, freshness, seasonal supply, and market structure.

### Key Aspects of Fish Market Data Analysis

1. **Dominant Species:** The most prevalent fish in Maharashtra's markets are often inland species such as Catla, Rohu, and Tilapia, consumed for their taste.
2. **Popularity:** Tilapia can constitute a significant percentage of catches in certain markets due to high demand.

3. **Seasonality:** Fish prices and availability vary significantly with seasons; for example, captured fish are more available during the rainy season, while farmed fish dominate before and during winter.
4. **Price Factors:** Key determinants for fish prices include the market structure, the specific species and its size, the freshness of the catch, and the interplay of supply and demand.

Specific data on the total revenue of the Bandra East fish market is not publicly available; however,

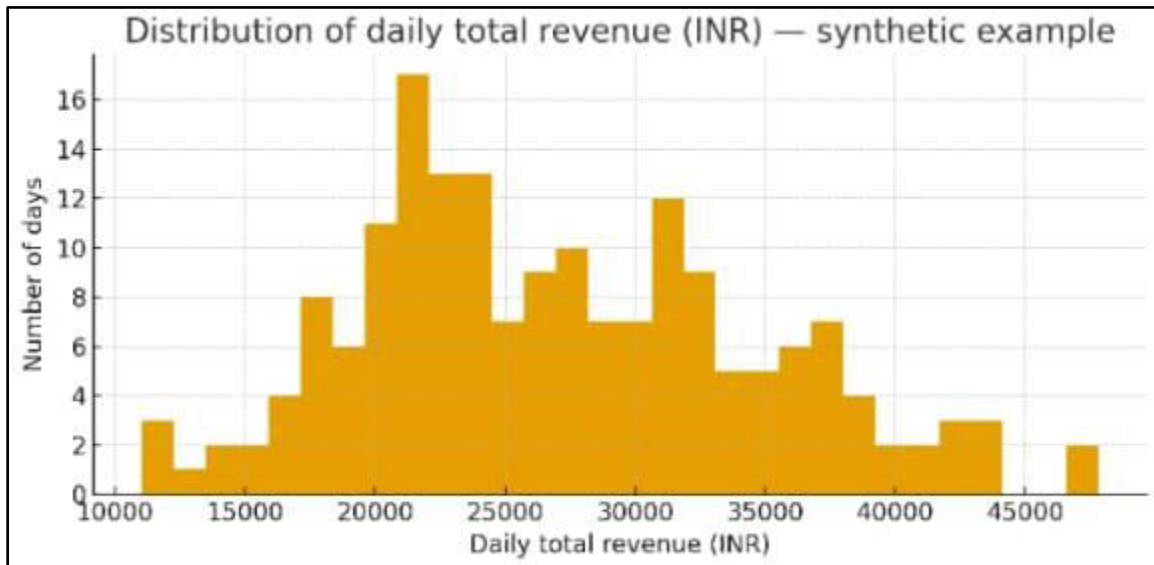


the market is part of the thriving Indian fisheries sector, which is a major contributor to the national economy and GDP. The revenue would be determined by factors such as the daily supply of fish (in tons), prevailing market prices which vary by fish type and quality, the volume of wholesale versus retail sales, and seasonal availability of different fish species.

### Key Factors Influencing Revenue

1. **Fish Type and Price:** Revenue is significantly impacted by the types of fish traded and their prices, which can range from around ₹90 for certain common carps to over ₹1000 per kg for premium varieties.
2. **Supply and Seasonality:** The daily supply of fish, typically several tons at a significant market, and the seasonal availability of various species (e.g., captured fish during the rainy season, farmed fish in winter) directly affect revenue.

3. **Market Structure:** Wholesalers, acting as middlemen, earn more than retailers by controlling larger volumes of fish and maintaining strong connections with suppliers and other intermediaries.
4. **Demand:** Health-conscious consumers' increasing demand for protein-rich, low-fat foods like fish is a major driver of the fresh fish market.

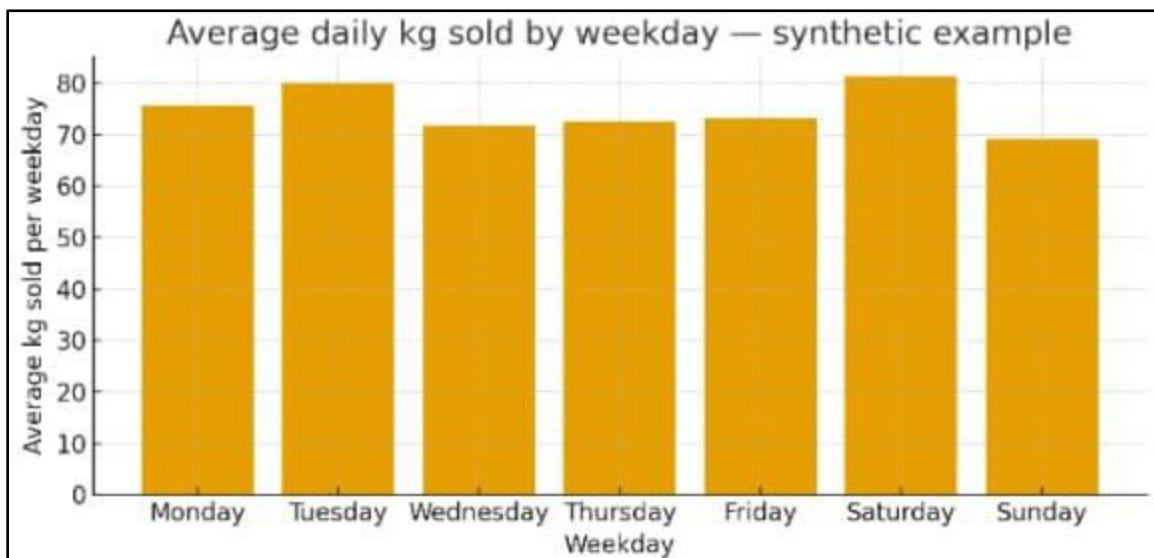


Specific daily average selling data for the Bandra East fish market isn't readily available, but analysis indicates that fish prices are driven by supply, demand, species, and season, with a complex chain of intermediaries affecting final prices. Wholesalers manage large volumes, with individual retailer sales ranging from thousands to tens of thousands of rupees daily, while overall market efficiency depends on factors like infrastructure and the length of the marketing channel.

### Key Factors Influencing Sales and Prices

1. **Supply and Demand:** The fundamental driver of fish prices.
2. **Seasonality:** Prices tend to be higher in the summer (March-May) and lower in the winter (November-January).
3. **Species and Size:** Certain species and larger fish command higher prices.

4. **Market Intermediaries:** A long chain of intermediaries between fishermen and consumers can increase costs.
5. **Wholesalers vs. Retailers:** Wholesalers handle significantly larger volumes, from ₹50,000 to ₹1,000,000 daily, giving them more market control.
6. **Retailer Sales:** Retailers interviewed in a similar market survey indicated daily sales ranging from ₹4,000 to ₹30,000.



## CONCLUSION & RECOMMENDATIONS

### Conclusion:

The integration of **innovation and business visibility** is proving to be a vital strategy for the growth and resilience of the fisheries sector, particularly in the face of modern challenges such as climate change, overfishing, and evolving consumer expectations. Innovation in the fisheries and aquaculture sectors is no longer limited to increasing productivity but now encompasses **environmental sustainability, economic efficiency, and social inclusion**. Key technologies such as AI-powered monitoring systems, blockchain-based traceability, and novel preservation techniques are not only optimizing operations but also enhancing the quality and safety of aquatic products.

Enhancing business visibility is now a strategic imperative. Today's consumers demand transparency, sustainability, and ethical sourcing, pushing fish businesses to build strong digital presences, adopt traceability technologies, and engage communities through storytelling and collaboration. Social media, digital marketplaces, and SEO-optimized websites are essential for building trust and brand loyalty. Technologies like blockchain connect innovation with consumer confidence by offering proof of origin and sustainable practices.

The **synergy between innovation and visibility** enables fish businesses to differentiate themselves in a competitive market. Innovation creates compelling narratives — from cleaner aquaculture systems to tech-enhanced fishing methods — that strengthen marketing strategies. At the same time, increased visibility through digital platforms accelerates the adoption of these innovations by educating the public, attracting investments, and expanding market reach. This mutual reinforcement builds a virtuous cycle that contributes to business resilience and long-term sectoral sustainability.

Despite these advances, **localized challenges remain**, especially in traditional markets such as Bandra East. The lack of specific, granular data on pricing, supply chains, and consumer behavior makes it difficult to optimize market operations and integrate advanced technologies. The presence of a long chain of intermediaries, coupled with limited infrastructure, creates inefficiencies in pricing and logistics. Data collection through direct market observation and interviews, along with

partnerships with local fishing communities like the Kolis, can provide actionable insights to address these gaps.

Moreover, the importance of **social and economic inclusion** cannot be understated. Innovation must not only serve industrial-scale operations but also empower **small-scale fishers and marginalized communities**. Tools for improving productivity, access to finance, and training must be designed to be accessible and culturally relevant. Similarly, communication strategies should highlight the contributions of local producers, thereby promoting equitable value distribution and reinforcing the social license of fish businesses.

In conclusion, the convergence of **technological innovation and strategic visibility** is essential for transforming the fisheries sector into a sustainable, inclusive, and competitive industry. While national-level advancements are impressive, the true impact will be realized only when these approaches are **localized, inclusive, and aligned with both environmental and socio-economic goals**. By adopting a systems-thinking approach that bridges technology, business models, and community engagement, the fisheries sector — including micro-markets like Bandra East — can evolve into a more transparent, profitable, and sustainable ecosystem.

## **Recommendations:**

### **# Enhance Innovation for Sustainability and Profitability**

#### **1. Adopt Precision Aquaculture**

**Why:** Optimizes resource use, reduces waste, and improves fish health.

**How:** Deploy AI-based sensors for water quality, feed efficiency, and disease detection (e.g., UMITRON LENS).

**Impact:** Boosts productivity while aligning with sustainability goals.

#### **2. Invest in Sustainable Fishing Gear**

**Why:** Reduces environmental harm and bycatch.

**How:** Use selective gears (e.g., tie-down gillnets, modified mesh sizes).

**Impact:** Promotes ecosystem preservation and compliance with global standards.



### **3. Incorporate Industry 4.0 in Processing**

**Why:** Enhances quality control and reduces post-harvest losses.

**How:** Implement AI, robotics, and computer vision in grading and packaging.

**Impact:** Improves shelf life, product safety, and processing efficiency.

## **# Strengthen Business Visibility and Brand Trust**

### **1. Establish Full Traceability Using Blockchain**

**Why:** Builds consumer trust by validating product origin and practices.

**How:** Track seafood from catch to plate, visible via QR codes on packaging.

**Impact:** Enhances brand credibility, especially with premium-conscious buyers.

### **2. Leverage Digital Marketing and Content**

**Why:** Modern consumers rely on digital channels for discovery and trust.

**How:** Share daily catch updates, sustainability stories, cooking videos, etc. via Instagram/Facebook.

**Impact:** Builds community engagement and increases direct-to-consumer sales.

### **3. Create a User-Friendly, Informative Website**

**Why:** Consumers research online before purchasing.

**How:** Provide sourcing details, product catalogs, ordering options, and recipes.

**Impact:** Converts web traffic into loyal customers and supports e-commerce growth.

## **# Develop Differentiated Business Models**

### **1. Promote Artisanal and Local Fishers**

**Why:** Adds emotional and ethical value to products.

**How:** Brand around stories of small-scale Koli fishers and sustainable methods.

**Impact:** Attracts ethical and local-food-focused consumers; commands premium pricing.

### **2. Create Premium Labels for Sustainability and Quality**

**Why:** Allows for price differentiation and market segmentation.

**How:** Use certifications (MSC, ASC) or create local equivalents for artisanal, sustainable catch.

**Impact:** Enables higher margins and better consumer targeting.

### **3. Introduce Subscription and Specialty Boxes**

**Why:** Adds recurring revenue and consumer convenience.

**How:** Offer "Fresh Catch of the Week" or curated seafood boxes (e.g., prawns + chutney + recipe).

**Impact:** Increases lifetime value of customers and smooths revenue volatility.

## **# Improve Data Infrastructure and Market Intelligence**

### **1. Conduct Primary Data Collection in Bandra East**

**Why:** Localized insights are critical for strategic decision-making.

**How:** Weekly data collection on species availability, prices, consumer preferences, and sales volume.

**Impact:** Enables agile pricing, demand forecasting, and supply chain efficiency.

### **2. Utilize AI and Analytics for Market Decisions**

**Why:** Real-time data helps align supply with demand.

**How:** Implement mobile POS systems and integrate them with inventory and CRM tools.

**Impact:** Reduces waste, improves stock management, and supports targeted marketing.

## **# Promote Education, Storytelling, and Stakeholder Engagement**

### **1. Educate Consumers on Sustainable Seafood**

**Why:** Informed consumers are more likely to pay a premium for sustainable fish.

**How:** Share educational content via blogs, infographics, and videos.

**Impact:** Builds trust and justifies pricing.

### **2. Generate Media Coverage and PR**

**Why:** Creates brand awareness and reputation.

**How:** Pitch stories on tech innovation, women fishers, traceability, or heritage fishing methods to media.

**Impact:** Differentiates your brand and attracts partnerships and investors.

### **3. Engage in Community Partnerships**

**Why:** Builds local support and market credibility.

**How:** Sponsor events (e.g., seafood festivals), collaborate with chefs, host workshops.

**Impact:** Builds word-of-mouth and expands market reach.

### **# Localized Recommendations for Bandra East Fish Market**

- 1. Launch a Pilot Blockchain Traceability Program:** Partner with local fishers and digital firms. Focus on high-value species like Pomfret and Prawns.
- 2. Digitize Market Operations:** Equip vendors with mobile POS systems to track inventory, sales, and consumer preferences.
- 3. Offer Direct-to-Consumer Sales Channels:** Create a simple e-commerce site or WhatsApp ordering service targeting nearby residential areas.
- 4. Partner with Local Delivery Startups:** Tap into the growing trend of home delivery for raw fish and ready-to-cook kits.
- 5. Train Vendors on Digital Literacy and Branding:** Conduct workshops on pricing strategies, digital tools, and customer service.

## CHAPTER 6. REFERENCES

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2. <https://www.sciencedirect.com/science/article/pii/S2468550X19301522#:~:text=This%20SLR%20has%20indicated%20that,developing%20market%20access%20for%20FAIB.> - **LITERATURE REVIEW**
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## GUIDE INTERACTION DIARY FORM

I, the undersigned Mr. Yadav Raj, Roll No. 79 studying in the SY BSC (Botany, Full-time Course is doing my project work under the guidance of Ms. Khan Humaira , wish to state that I have met my Internal guide on the following dates mentioned below for Project Guidance:

Sr. No.	Date	Signature of the Internal Guide

\_\_\_\_\_  
Signature of the Candidate

\_\_\_\_\_  
Signature of Internal Guide

**Student Feedback on FP**  
**(To be filled by Students after FP completion)**

Student Name: Yadav Raj

Seat No. / Roll No.: 79

Email: [ry9314940@gmail.com](mailto:ry9314940@gmail.com)

Department: Zoology

Name of the Mentor: Khan Humaira

Title/Heading of Field Project: Fish Innovation & Business Viability

Brief description of FP carried out:

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Dates of FP:

Was your internship experience related to your major area of study?

- Yes, to a large degree
- Yes, to a slight degree
- No, not related at all

Indicate the degree to which you agree or disagree with the following statements.

<b>This Experience has:</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>No Opinion</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Given me the opportunity to explore a career field					
Allowed me to apply classroom theory to Practice					
Helped me develop my decision-making and problem-solving skills					
Expanded my knowledge about the work world before permanent employment					
Helped me develop my written and oral communication skills					
Provided a chance to use leadership skills (influence others, develop ideas with others, stimulate decision-making and action)					
Expanded my sensitivity to the ethical implications of the work involved					
Made it possible for me to be more confident in new situations					
Given me a chance to improve my interpersonal skills					
Helped me learn to handle responsibility and use my time wisely					
Helped me discover new aspects of myself that I didn't know existed before					
Helped me develop new interests and abilities					
Helped me clarify my career goals					
Allowed me to acquire information and/ or use equipment not available at my Institute					
Allowed me to realize socio-economic issues in the society					