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Guide for Preparation of Detailed Project Report (DPR) for Development of Modern Wholesale Fish Market

Department of Fisheries
Ministry of Fisheries, Animal Husbandry and Dairying
Government of India

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CONTENTS

1. Executive Summary

1.1 Project Overview

1.1.1 Brief introduction to the project: Please provide brief information of the project with regard to location, capacity and other relevant information.

1.1.2 Objective and scope: As defined, this point shall explain the objective of the project defining how it is conceived to mark a change in the fisheries scenario of the region and the aspects it will cover to make significant contribution towards providing a hygienic, sustainable and fair market place to the local fish vendors, aggregators, wholesalers, traders and fish farmers as well as the consumers.

1.2 Key Highlights

1.2.1 Sustainability Features: The Modern Fish Markets are envisaged as energy efficient and sustainable facilities, therefore all efforts must be made towards making the facility a zero discharge unit, deploying green energy, energy efficient machines and lighting adopting water conservation methods like rain water harvesting and use of water efficient fixtures these points may be explained in this point.

1.2.2 Expected Benefits: Please explain in this segment, the benefits likely to accrued on account of development of the proposed wholesale Modern Fish Market in the area. This may include **direct beneficiaries** like the farmers, consumers, the people employed at the facility and the indirect beneficiaries like transporters, local community and other stakeholders involved in forward and backward linkages etc.

1.2.3 SMART Technology Integration: The Modern Fish Market intends to follow the global standards and following the current trends and expects deployment of Artificial Intelligence and Internet of Things for better efficiencies and smart management of the market. For example traffic management system, intelligent allocation of slots for the incoming material for shorter unloading periods, and quick turnaround time of the trucks. It can also be used for efficient waste management systems, inventory management, e-markets and monitoring of the environmental parameters in real time basis to flag the management in case of any undesired deviations. Please provide brief information about the degree of digitalization and the extent of integration of smart technologies at the facilities proposed to be developed at the proposed Modern Fish Market.

2. Introduction

2.1 Background and Need:

2.1.1 Current Market Scenario: The state/UT needs to collate data on the number of markets operating in the vicinity of the area proposed for development of modern fish market, the existing facilities available in those markets and the volume. List out challenges faced by such markets that underline the shortfalls of the current markets vis-à-vis the consumer expectations. The state/UT needs to highlight the core issues like lack of hygiene, poor quality ice, issues regarding sustainability, high energy consumption and effluent drainage in conjunction with poor waste management mechanisms.

2.1.2 Need for Modernization and Sustainability: State/UT needs to provide information as to why an investment in the proposed Modern Fish Market is relevant. How it plans

to cater to present day priorities like sustainability, customer preferences shifting towards hygiene, superior quality and value added products. Please explain the outcomes expected on post construction of the proposed facilities.

2.2 Project Vision:

2.2.1 Vision Statement for the wholesale Fish Market: This is a brief statement on what the modern fish market plans to achieve over the lifetime of the facility proposed. This can vary depending on the scale and capacity of the fish market and the local needs.

2.2.2 Long-term and short-term goals: This section explains the priorities of the proposed modern fish market and breaks it down into short term goals that talk about immediate priorities that must be achieved within first five years of the lifetime of the investment done. This can be about :

2.2.2.1 The transactional volume achieved.
2.2.2.2 Reduction in carbon footprint
2.2.2.3 Deployment of green energy modules in phased manner
2.2.2.4 Scaling up, if planned.
2.2.2.5 Reduction in the usage of energy, water or any other resource. (Especially in case of a brownfield project)

Similarly, the long term goals may be explained for a fair understanding of the impact that the proposed fish market plans to make in the fisheries marketing sector.

2.3 Project Scope:

2.3.1 Description of the market's services and features: The State/UT will explain the description of services offered by the proposed facility. Following are some of the indicative services that may be included basis the scale of the proposed Modern Fish Market.

2.3.1.1 **Services:**

2.3.1.1.1 **Sales**: Sales of fresh fish and processed fish products to consumers (individual and businesses).

2.3.1.1.2 **Online Information**: A digital platform for customers for real-time updates on availability and pricing.

2.3.1.1.3 **Processing Services**: On-site processing of fish, including cleaning, filleting, and packaging for customers and businesses.

2.3.1.1.4 **Customer Support**: Assistance with product selection, information on sustainable choices, and handling customer inquiries and feedback.

2.3.1.2 **Features:** This section includes the features of the market like technology inclusions, or sustainable material/ components included to make the modern fish market eco-friendly. Some examples are listed below:

2.3.1.2.1 **SMART Technology**: Integration of IoT sensors for real-time inventory and environmental monitoring, automated sorting, and digital platforms for enhanced customer interaction.

2.3.1.2.2 **Eco-Friendly Infrastructure**: Use of sustainable materials, energy-efficient systems, and effective waste management practices.

2.3.2 Stakeholder engagement and impact:

2.3.2.1 **Stakeholders:**

2.3.2.1.1 **Consumers**: Expect high-quality and transparent market practices.

2.3.2.1.2 **Vendors/Suppliers**: Require efficient logistics, fair pricing, and opportunities to reach broader customer bases through the market.

2.3.2.1.3 **Employees**: Need a safe & secure, well-organized work environment with modern tools, better working conditions and systems to enhance their productivity and satisfaction.

2.3.2.1.4 **Community**: Interested in the market's contribution to local economic development and environmental stewardship.

2.3.2.2 **Impact:**

2.3.2.2.1 **Consumers**: Improved access to fresh, high-quality fish and fish products with enhanced shopping convenience.

2.3.2.2.2 **Vendors/Suppliers**: Better coordination, reduced wastage, and increased sales opportunities due to integrated supply chain and market visibility.

2.3.2.2.3 **Employees**: Enhanced work conditions, reduced manual labour through automation, and opportunities for skill development with new technologies.

2.3.2.2.4 **Community**: Positive economic impact through job creation, increased local business activities, and promotion of sustainable practices in the region

3. Project Description

3.1 Site and Location Analysis:

3.1.1 Site Selection: The site selection should be done carefully keeping in view the considerations like the

3.1.1.1 Fish cultivated in the catchment area of the proposed modern fish market and the distance from other hotbeds of fish production/coastal landing centres to assess the supply side of the market.

3.1.1.2 The population of the city/town where the fish market is planned to get an estimate of the existing demand for fish. A CAGR will indicate the future projections for the state/UT to plan the capacity of the fish market

3.1.1.3 Make an assessment of the existing markets to analyse the possibility of the volumes that can be easily transferred to the Modern Fish Market because of USP of better facilities, better quality and hygiene.

3.1.1.4 Analysis of the existing competition in the market to strategize to offset the threat.

3.1.1.5 Information on the demography and the socio-economic strata of the area will help in forecasting the demand that might face changes during some parts of the week, month or the year.

3.1.2 Accessibility and infrastructure:

3.1.2.1 A thorough assessment of the availability of the existing infrastructural facilities like availability of adequate water, wide access roads to allow unhindered traffic movement, electricity and network connectivity be done before finalizing the site.

3.1.2.2 Care may be taken to keep the fish market site away from educational institutions, residential areas, garbage dumping site, water treatment plant, Public parks, hospitals or a sewage treatment plant.

3.1.2.3 The site should preferably be a two side open plot with separate entrances and exits for heavy vehicles moving goods and that of the customers entering to avail the retail area.

3.1.2.4 The site will preferably have a flat topography and should not be a low lying area that might get inundated. The site should have a good drainage.

3.1.3 Location details and site map:

3.1.3.1 The State/UT will provide the land details, including registration/ lease, plot area and khasra number etc. The State/UT will provide an undertaking that the proposed land is free from all encumbrances.

3.1.3.2 Proper site survey along with a detailed geo-technical survey must be carried out and the information used for planning the building. Both reports are to be the part of the DPR.

3.1.3.3 A detailed site map must be attached providing the details of the nearby areas and the access roads

3.1.3.4 The site map will also provide the proposed traffic flow and if the estimated traffic would require provisions for the State/UT to deploy traffic policemen.

3.2 Engineering Survey and related studies:

3.2.1 Topographical Survey: To gather detailed information about the physical features and terrain of the selected site State/ UT has to conduct a detailed topographical survey using Total Station/GPS, create contour maps to understand elevation changes, identifying natural features and existing infrastructure etc.

3.2.2 Geotechnical Investigation: To assess the soil and subsoil conditions for construction suitability, State/ UT need to carryout sub-soil investigations and analyse soil properties such as bearing capacity, moisture content, and compaction etc.

3.2.3 Utility and Infrastructure Survey: To evaluate the availability and capacity of existing utilities and infrastructure, state/ UT should carry out survey of existing water supply, sewage, and drainage systems, assess the capacity of electrical and power supply networks, Identify nearby transportation and logistics infrastructure etc.

3.3 Market Layout and Design:

3.3.1 Architectural layout of site: Basis the information collated under points 3.1 to 3.2 above, the volume of fish/seafood and the foot fall of the market can be estimated. This will be the guiding light for deciding:

3.3.1.1 The total area of the building and the trunk infrastructure required.

3.3.1.2 The components and their respective capacities along with the area required in the layout plan. The planned components can be tabulated as below:

Sr. No.	Name of the Component	Planned Capacity	Cost (Rs. In lakhs)
1	Ice Plant	20 TPD	60
2			
3			
4			

3.3.1.3 The size and the degree of mechanization required at the receiving bay for loading-unloading of the fish at the market.

3.3.1.4 Size and the number of Auction halls.

3.3.1.5 The number of Wholesale shops

3.3.1.6 Number of Kiosks in the retail market.

3.3.1.7 The food court and the customer area.

3.3.1.8 Administrative area.

3.3.1.9 Capacities of ancillaries like , RO plant, ETP , Electricals, Access gates etc.

3.3.1.10 The large markets may have provisions for a small conference hall, a training hall and the dormitories.

3.3.1.11 The volume of traffic will decide the area allocated to the parking, and if required, dormitories with bath and toilet facility for the truck drivers.

3.3.1.12 The larger the facility the greater the necessity of digitalization for improving operational efficiencies.

3.3.2 Building floor plans and other Engineering considerations

3.3.2.1 Planning and design of the modern fish market must be in compliance with the building bylaws of the concerned municipal corporation/Authority. Following points are suggested keeping in view of the operational and functional aspects for suitable consideration.

3.3.2.2 The design must prioritize cleanliness and proper refrigeration to maintain the freshness of the fish. Surfaces should be easy to clean, and there should be ample facilities for washing and waste disposal.

3.3.2.3 The market should have a logical flow that minimizes crowding and allows for easy navigation. This includes clear signage, designated areas for different types of fish, and efficient checkout points.

3.3.2.4 It is suggested that the access to the wholesale segment of the market may be completely separated from the retail segment.

3.3.2.5 Design the market with safety in mind, including non-slip floors, first aid stations, and emergency exits.

3.3.2.6 The building should be well lit and must have access to a good amount of sunlight.

3.3.2.7 Different zones for different types of seafood should be designed with appropriate temperature control to ensure the longevity of the products.

3.3.2.8 The building must have good ventilation and be devoid of odours.

3.3.2.9 Since the volumes in the wholesale segment will be high with a huge volume turnaround, it should be located on the ground floor to avoid the movement of goods through service lifts to the minimum.

3.3.2.10 The support infrastructure like the ice plant and the cold room should be the extensions of the wholesale areas and connected internally for easy movement.

3.3.2.11 The processing area should be housed on the ground floor with the fishmeal plant as its extension. Processing and the fish meal plant should preferably be away from the retail area.

3.3.2.12 Retail area can be assigned either to the ground floor or in case of land shortage, leading the plan to go vertical, can be housed on the first floor along with the customer area and the food court.

3.3.2.13 Separate bays may be provided, especially in the retail section, for the movement of the goods supplied and the customers

3.3.2.14 The building should be Wi-Fi enabled for easy connectivity for the services the IoT and the AI enabled operations to collect real time data at all times. Necessary redundancies be built to keep the uptime at 99.99%.

3.3.2.15 The design should incorporate elements that reflect the market's brand, such as logos and consistent color schemes, to create a memorable identity.

3.3.2.16 Design the market with safety in mind, including non-slip floors, first aid stations, and emergency exits

3.3.2.17 Encourage a sense of community by including spaces for local events, cooking demonstrations, and educational programs.

3.3.2.18 Ensure that the market is accessible to everyone, including those with disabilities. This includes ramps, wide aisles, and accessible counters.

3.3.2.19 The market should have a logical flow that minimizes crowding and allows for easy navigation. This includes clear signage, designated areas for different types of fish, and efficient checkout points.

3.4 SMART Technology Integration: Suggested technology interventions and some of its applications are listed here under. These are only a few examples and the state/UT is encouraged to find relevant applications suitable for integration in the proposed market

3.4.1 Internet of Things: All smart devices are connected to internet and can exchange information that can be used for data collection or simply for switching the devices on or off. In case of a modern fish market it is suggested that this technology be applied for

3.4.1.1 Traffic management using the Fastag for collection of the vehicle information and collecting the parking fee basis the time stamp of the entry and exit of the vehicle.

3.4.1.2 It can used for inventory management by gathering the weight of the tagged vehicle while it stops at the boom barrier.

3.4.1.3 Using the barcode to tag the product type and/or to capture information about the supplier

3.4.1.4 Deploying the smart meters to monitor and bill the utility or the services used.

3.4.1.5 Using smart sensors- to monitor various parameters like temperature, humidity & gases.

3.4.1.6 System triggers for restocking based on inventory levels and sales data.

3.4.1.7 Alerts for products nearing expiration to minimize waste and manage markdowns.

3.4.1.8 Machines to sort fish by type, size, and quality, improving efficiency and accuracy.

3.4.1.9 Automated packaging solutions to ensure consistent quality and speed in fish processing.

3.4.1.10 Real-time updates and coordination with suppliers and logistics providers for seamless operations.

3.4.2 Use of Artificial Intelligence: Artificial Intelligence and the machine language are used for various applications and enables to run business models to understand the outcomes of the decisions taken before they are implemented on the ground.

3.4.2.1 AI can be integrated to collate arrivals of the fish transport vehicles and the quantity carried by them to seamlessly allow allocation for a bay at the receiving bay and assigning mechanized equipment to assist unloading to that the perishable material is handled quickly while relieving the truck in the shortest possible time.

3.4.2.2 AI can assess the historic data to arrive at the demand patterns to help in forecasting the demand to regulate the supply thereby avoiding glut and instances of possible post-harvest losses.

3.4.2.3 Similarly, historic data of a species can be a good indicator of future price fluctuations enabling decisions that can help in maximising the profits for the fish farmers.

3.4.3 Interactive customer enquiry points/ information desk:

3.4.3.1 Digital signage and touchscreen kiosks can be used for information dissemination that is updated real-time. This can help the customers to locate the availability of their favourite fish at a particular kiosk. The touch screen kiosks can also provide inventory information of any particular stock assisting them in making an informed decision.

3.4.4 Automated systems at vendor points: Point of Sale devices allow a financial transaction to happen seamlessly across the multiple payment options. This allows the customer the flexibility of choosing the payment option of their choice.

3.4.5 Digital platforms/ App based:

3.4.5.1 Real-time information on available fish products, including prices and descriptions.

3.4.5.2 Platforms for reviews, ratings, and feedback from customers.

3.4.5.3 Tools for tracking stock levels, sales, and reordering.

3.4.5.4 Insights into sales patterns, customer preferences, and market trends.

3.4.5.5 Direct communication channels with market management and other vendors.

All care must be taken for the data security and the 99.9 % uptime of the system deployed. It is advisable to use data encryption and build appropriate redundancies as a back plan for possible system breach/crashes.

3.5 Sustainable Practices:

3.5.1 Eco-friendly infrastructure: The state/UT may consider planning a green building, using its discretion to use green construction material like composite wood, low volatile organic compound paints etc.

3.5.2 Energy management: Working towards energy conservation following steps may be considered:

3.5.2.1 Deployment of solar panels/ windmills for energy generation to supplement the demand.

3.5.2.2 Using energy efficient equipment and LED lighting.

3.5.2.3 Use of Electric vehicles for transport.

3.5.3 Sustainable Sourcing:

3.5.3.1 Partnering with suppliers who follow sustainable fishing practices and have relevant certifications.

3.5.3.2 Preference for local suppliers to reduce transportation emissions and support local economies.

3.5.4 Waste Reduction:

3.5.4.1 Minimizing packaging materials and using biodegradable or recyclable packaging.

3.5.4.2 Collaboration with local organizations to donate unsold but safe fish products to reduce waste.

3.5.5 Water management: Water is increasingly becoming scarce and therefore the focus is on water conservation in the operations planned since fish markets have intensive use of potable water. The suggested interventions to be considered are as follows:

3.5.5.1 Rainwater harvesting allows areas with water scarcity to harvest and store rainwater for later use. This supplements the water demand of the facility.

3.5.5.2 Low-flow fixtures may be used at the facility to reduce the wastage of water.

3.5.5.3 Greywater systems for the use of recycled water for purposes like irrigation of the green areas and flushing of the toilets

3.5.6 Waste management: With a vision to make the Modern Fish Market a zero discharge facility following interventions may be considered for implementation:

3.5.6.1 Solid waste disposal systems be set up for recyclable waste to create a circular economy.

3.5.6.2 The organic waste and processing waste can be processed as fish meal deriving value out of the waste generated.

3.5.6.3 The effluent generated out of washings of the surfaces can be processed and recycled for use in the green area and flushing of toilets.

3.6 Drawing and Designs

3.3.1 **Conceptual Designs and Drawings:** Early stage of designs and drawings to be prepared by State/ UTs for broader outline of engineering considerations. After preparation of conceptual design and drawing, a rough preliminary cost has been estimated for the project to understand trend.

3.3.2 State/ UTs need to carry out analysis of conceptual designs and drawings for finding design alternatives to explore best technical solution within the economic considerations.

3.3.3 **Detailed Design and Drawing:** A detailed design may be developed based on the considerations and key learnings from the previous steps. Detailed design includes architectural designs, MEP designs and Environmental & Sustainable considerations.

3.7 Quantity Survey

3.7.1 After finalizing the components including civil, mechanical, IT/ Technology infusion based, sustainable practice based etc., detailed estimation of quantity has to be prepared by state/ UTs using engineering quantity survey methods.

3.7.2 Based on the enumerated quantities, a detailed BOQ (Bill of Quantity) and Material List to be prepared.

3.8 Detailed Cost Estimate

It has been covered under 5.1.

3.9 Project Scheduling and Planning

3.9.1 The L0 Plan (Baseline Plan) for the development of a fish market in India provides a high-level overview of the project schedule, key milestones, and critical path activities. This plan serves as the foundation for detailed project planning and monitoring, ensuring timely and efficient project execution.

3.9.2 Based on milestone, duration, activity start and finish date, constraints, activity relations etc. the project activities are scheduled under Work Breakdown Structure (WBS) in a Gnatt Chart.

3.10 Mode of Finance:

3.10.1 State/ UTs may provide the means of financing the project.

4. Project Implementation schedule

4.1 Project Phases:

4.1.1 The DPR should contain appropriate time for completion in the form of bar chart. The time period for completion of each activity may be estimated and indicated in the DPR. Care should be taken to curtail the project completion period to ensure that the fish market is developed, completed and commissioned in a time bound manner.

4.2 Timeline and Milestones:

4.2.1 Gantt chart or timeline showing key milestones.

4.2.2 Expected start and end dates for each phase.

4.3 Risk Management and Mitigation Plan:

4.3.1 Identification of potential risks: The State/UT should identify the potential risk and hazards and take into account the mitigation mechanisms.

4.3.2 Mitigation strategies: Cost for such preventive measures must be included in the DPR.

5. Financial Plan

5.1 Capital Expenditure:

5.1.1 The capital expenditure can be broken down into:

5.1.1.1 Basis the calculations done under points 3.7 and 3.8 of this document, the State/UT will have to carry out project cost estimation. Detailed cost estimates must be done using **the respective prevailing state SOR or the CPWD rates in case of UTs**. The capital outlay must be supported by the detailed drawings of each component of the facility to be attached in the appendices.

5.1.1.2 The **software layer** can be calculated separately along with the related hardware required to support the deployment of the smart systems. This should include the detailed costs of:

5.1.1.2.1 The cost of the software and customization charges

5.1.1.2.2 The cost of the server whether owned or on cloud

5.1.1.2.3 The cost of sensors and other hardware required for deployment of the planned aspects that will be covered under the smart plan.

Sl.No.	Item Description	Unit of measurement	Quantity	Rate	Amount

5.1.2 **Contingency budget**: 3% of the total project cost as contingency while 2% is allocated as the establishment cost. The contingency is allowed to meet the unforeseen expenditure including expenditure towards legal and regulatory costs wherever required, advertisement and publicity costs etc.

5.2 Operational Expenditure:

5.2.1 **Estimated operating costs**: The state/ UT must include the operational expenses required for running the facility and the planned components of the modern fish market. This must include the cost of input items, if required, as well as the operational requirements like electricity, maintenance, staffing etc. The details of the operational cost of each aspect of the modern fish market may be attached in the appendices. This may include:

5.2.1.1 Maintenance: Regular upkeep of the market infrastructure as well as the tech infrastructure

5.2.1.2 Staffing: This shall include the cost of salaries, benefits and training provided to the staff

5.2.1.3 Costs of Energy and Other resources: Cost of electricity, water and any other resource may be included in this head.

5.2.1.4 Cost incurred on sustained marketing/ branding effort.

5.2.2 Sustainability program costs:

5.2.2.1 Waste management cost: This shall include the cost incurred for running the recycling units and ETP.

5.2.2.2 Other engagement activities planned for awareness about the advantages of a sustainable facility.

The Concerned State/UT will confirm that the cost involved in post construction management of the wholesale market will be met by the state.

5.3 Revenue Projections:

5.3.1 Revenue streams: The state shall explain the revenue streams proposed to arrive at the expected revenue annually.

5.3.1.1 The revenue streams may include rentals, parking fees and common area maintenance charges levied on the shop-keepers/ operators of the components basis the area of the shop/kiosk.

5.3.1.2 An annual user fee may be levied for the use of the digital platform integrated in the market.

5.3.1.3 A nominal market cess may be levied on the wholesalers on the basis their trade volume.

5.3.1.4 Break-even analysis may be done to understand the gestation period of the facility to achieve financial sustenance.

5.3.1.5 Other financial parameters like IRR and NPV may be calculated for a better understanding of the project viability.

5.3.1.6 At least 5 years' projection of the revenue and profits

5.4 Financial Viability:

5.4.1.1 NPV values may be included in the DPR for better understanding of the financial viability of the project

5.4.1.2 IRR values may be included in the DPR for better understanding of the financial viability of the project

5.5 Social Cost Benefit Analysis: To determine and measure the expected future economic and social benefits of the project. The state /UT may define the direct and indirect benefits derived from the project in terms of employment generated, whether direct or indirect, and the fish farmers and other stakeholders benefited of the region.

Sr. No.	Head	Total
1	Direct Employment Generated (Skilled/Unskilled)	
2	Indirect Employment (Skilled/Unskilled)	
3	Fish Farmers Benefited	
4	Other Stakeholders (Traders, Wholesalers, etc.)	

6. Sustainability Plan

6.1 Environmental Impact:

6.1.1 Assessment of the market's environmental footprint: Detailed assessment of the Market's Environmental Footprint mandatory to be furnished, along with statutory compliances and clearances.

6.1.2 Strategies for reducing impact: The goals may be set to incrementally reduce the environmental impact of the facility, especially in case of the brownfield projects.

6.2 Community Engagement:

6.2.1 Education programs for sustainable consumption: Regular engagement is advised to stress on the sustainable practices and to educate the community and other stakeholders to improve awareness.

6.2.2 Local community benefits: It is suggested that the state/UT engage with the local community from time to time to understand the concerns, if any, and address them amicably.

6.3 Certification and Compliance:

6.3.1 Relevant environmental and quality certifications: A modern fish market envisaged with the global standards needs to meet the various global food safety standards as an assurance to the customers about the standard of quality it offers. The state may seek quality certifications like

6.3.2 Compliance with local and international regulations: All the regulatory compliances whether local or international must be met like FSSAI etc.

6.3.3 Planning and design of the building must be in compliance with the building by-laws of the concerned Municipal Corporation or Authority.

7. Appendices

7.1 Detailed Drawings and Layouts:

7.1.1 Architectural designs: Must have the detailed drawings of the floor plan, elevation etc.

7.1.2 Technical schematics: Specifications and standards to be included in the DPR.

7.2 Market Research Data:

7.2.1 Survey results: All surveys carried out may be enclosed here for reference.

7.2.2 Market analysis reports: The market analysis report and its findings to be included in the DPR in this section.

7.3 Legal and Regulatory Documents:

7.3.1 Permits and licenses: Please provide a comprehensive list of permits and licenses applied and received.

7.3.2 Environmental clearances: Environmental clearances availed may be shared in this section.

7.4 Supporting Documents:

7.4.1 Technical specifications of the components, machinery or any other equipment used.

7.4.2 Financial calculations or price quotations of the components received.

8. Annexures

8.1 Project Timeline:

8.1.1 Detailed timeline with dependencies.

8.2 Budget Breakdown:

8.2.1 Detailed financial breakdown.

Template: Detailed Project Report (DPR) for World-Class Fish Market

1. Executive Summary

1.1 Project Overview

1.1.1 Brief introduction to the project.

1.1.2 Goals and objectives.

1.2 Key Highlights

1.2.1 SMART technology integration.

1.2.2 Sustainability features.

1.2.3 Expected benefits.

2. Introduction

2.1 Background and Need

2.1.1 Current market scenario.

2.1.2 Need for modernization and sustainability.

2.2 Project Vision

2.2.1 Vision statement for the fish market.

2.2.2 Long-term and short-term goals.

2.3 Project Scope

2.3.1 Description of the market's services and features.

2.3.2 Stakeholder engagement and impact.

3. Project Description

3.1 Site and Location Analysis

3.1.1 Location details and site map.

3.1.2 Accessibility and infrastructure.

3.2 Engineering Survey and related studies

3.2.1 Topographical Survey

3.2.2 Geotechnical Investigation

3.2.3 Utility and Infrastructure Survey

3.3 Market Layout and Design

3.3.1 Architectural layout of site.

3.3.2 Building floor plans and other Engineering considerations.

3.3.3 Components planned

Sr. No.	Name of the Component	Planned Capacity	Cost (Rs. In lakhs)
1	Ice Plant	20 TPD	60
2			
3			
4			

3.4 SMART Technology Integration

3.4.1 IoT sensors (e.g. RFID, barcode, smart meter, sensors- temperature, humidity & gas)

3.4.2 Use of AI (e.g. forecasting of arrival, demand, and price)

3.4.3 Interactive customer enquiry points/ information desk (e.g., digital signage, touchscreen kiosks etc.)

3.4.4 Automated systems at vendor points (e.g. POS devices).

3.4.5 Digital platforms (e.g. interactive website and ERP system for managing finance, inventory, traffic and human resources).

3.5 Sustainable Practices

3.5.1 Eco-friendly infrastructure (e.g., low volatile organic compound (VOC) Paints, composite Wood)

3.5.2 Energy management (e.g., solar panels; Heating, Ventilation, and Air Conditioning (HVAC) systems).

3.5.3 Water management (e.g., rainwater harvesting, low-flow fixtures, greywater systems).

3.5.4 Waste management (e.g., recycling systems).

3.6 Drawing and Designs

3.6.1 Conceptual Designs and Drawings

3.6.2 Analysis of best technical solution within the economic considerations.

3.6.3 Detailed Design and Drawing

3.7 Quantity Survey

3.7.1 Detailed estimation of quantity

3.7.2 Detailed BOQ (Bill of Quantity) and Material List

3.8 Detailed Cost Estimate

3.9 Project Scheduling and Planning

3.10 Mode of Finance

4. Project Implementation Schedule

4.1 Project Phases

4.1.1 Phase 1: Planning and Design.

4.1.2 Phase 2: Infrastructure Development.

4.1.3 Phase 3: Technology Deployment.

4.1.4 Phase 4: Testing and Launch.

4.2 Timeline and Milestones

4.2.1 Gantt chart or timeline showing key milestones.

4.2.2 Expected start and end dates for each phase.

4.3 Risk Management and Mitigation Plan

4.3.1 Identification of potential risks.

4.3.2 Mitigation strategies.

5. Financial Plan

5.1 Capital Expenditure

5.1.1 Initial investment breakdown of total Capex (infrastructure, technology, etc.).

Sl.No.	Item Description	Unit of measurement	Quantity	Rate	Amount

5.1.2 Contingency budget.

5.2 Operational Expenditure

5.2.1 Estimated operating costs (maintenance, staffing, etc.).

5.2.2 Sustainability program costs.

5.3 Revenue Projections

5.3.1 Revenue streams (retail sales, online platform, etc.).

5.3.2 Break-even analysis.

5.4 Financial Viability

5.4.1 Financial projections for 5-10 years.

5.4.2 Return on Investment (ROI).

5.4.3 NPV

5.4.4 IRR

5.5 Social Cost Benefit Analysis:

Sr. No.	Head	Total
1	Direct Employment Generated (Skilled/Unskilled)	
	Indirect Employment (Skilled/Unskilled)	
	Fish Farmers Benefited	
	Other Stakeholders (Traders, Wholesalers, etc.)	

6. Sustainability Plan

6.1 Environmental Impact

6.1.1 Assessment of the market's environmental footprint.

6.1.2 Strategies for reducing impact.

6.2 Community Engagement

6.2.1 Education programs for sustainable consumption.

6.2.2 Local community benefits.

6.3 Certification and Compliance

6.3.1 Relevant environmental and quality certifications.

6.3.2 Compliance with local and international regulations.

7. Appendices

7.1 Detailed Drawings and Layouts

7.1.1 Architectural designs.

7.1.2 Technical schematics.

7.2 Market Research Data

7.2.1 Survey results.

7.2.2 Market analysis reports.

7.3 Legal and Regulatory Documents

7.3.1 Permits and licenses.

7.3.2 Environmental clearances.

7.4 Supporting Documents

7.4.1 Technical specifications.

7.4.2 Financial calculations.

8. Annexures

8.1 Project Timeline (Detailed timeline with dependencies)

8.2 Budget Breakdown (Detailed financial breakdown)