

**DESIGN IMPACT >>>>
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A Social
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FISH DRYING PRACTICES BY MARGINAL FARMERS



THEME: SEAFOOD SUPPLY CHAIN & HYGIENE



FISH DRYING PRACTICES BY MARGINAL FARMERS

STAKEHOLDER

PROF DR. MANJANAİK B
HEAD OF THE DEPARTMENT OF FISH PROCESSING
TECHNOLOGY, COLLEGE OF FISHERIES

Core Issue

Traditional methods of drying and handling fish in open, unsupervised coastal areas are highly unhygienic. Exposure to dust, flies, open defecation areas, and lack of standardized drying platforms leads to contamination, foul odors, and serious health risks for consumers and vendors. The absence of a centralized hygiene system results in inconsistent quality, potential foodborne illnesses, and loss of consumer trust.

Constraints

- Lack of Infrastructure: No standardized drying platforms or covered spaces; most drying is done directly on the sand or roadside.
- Limited Water Access: Inadequate access to clean water for washing fish before and after drying.
- Weather Dependency: Drying is heavily dependent on weather conditions, which affects hygiene and consistency.

Context

Dry fish is a vital part of the coastal economy, especially for small-scale vendors. However, the lack of basic infrastructure—such as clean drying racks, covered storage, and water access—results in unhygienic processing conditions. This impacts public health, market value, and environmental conditions around the production zones. A centralized hygiene management system can improve quality, safety, and efficiency while supporting vendors with better market access.

Groundwork to be considered

- What drying infrastructure is suitable for maintaining hygienic conditions in coastal environments?
- How to monitor and regulate hygiene practices among small-scale fish vendors?
- What kind of visual labeling can indicate hygienic compliance for dry fish products?
- How can waste (e.g., fish parts, packaging) be sustainably disposed of near drying areas?
- What low-cost technology or sensors can be used to ensure hygiene compliance?
- How to train and incentivize vendors to adopt safer drying and packaging methods?



Existing Systems

- Traditional Drying Methods: Fish is dried on open beaches or rooftops without protective coverings, exposing it to dust, animals, and pollutants.
- Manual Quality Checks: Visual inspection by vendors; no scientific hygiene monitoring or microbial testing.
- Basic Storage: Often stored in jute sacks or open containers, without moisture-proofing or pest protection.

Resources

- <https://picvisa.com/waste-on-beaches-a-failure-of-civic-responsibility/>
- <https://www.cift.res.in>
- <https://mpeda.gov.in>
- [Detailed Case Study](#).