

**Leveraging Emerging Technologies for Efficient Livestock
Management & Retailing**

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Prawn Farmers Federation of India

Indian Shrimp Sector

- The youngest sector - just about 40 years of scientific farming
- Covering about 140,000 Ha of land in 9 maritime states
- Second largest producer and exporter of shrimps globally
- Top supplier to USA traditionally with > 40% market share.
- AP lions - share 70%
- Highly fragmented farming operations

Technologies employed in Shrimp Farming

- Genetically improved Broodstock - SPF, SPR, SPT - all imported though
- Sentinel trials - field evaluation of multiple families of a breeding program
- Genetic improvement program for domestic species
- Shrimp hatcheries - Biosecurity & Larval Rearing - top class
- Probiotics & prebiotics - Extensively used
- Automatic feeders innovations - sensory, moving & solar powered
- Sensors and IOT to monitor pond water parameters
- Nurseries and multi phase farming
- Mobile app support for farming guidance
- Automated seed counters

All of the above is not mainstream!!

- Majority farmers yet to adapt these technologies
- Present mood is - SURVIVAL
- GLOBAL oversupply and shrinking market has crashed the prices to all time low
- Farmers are going back to basics
- Lower densities and value oriented sizes
- Cutting down on expenses by choosing low cost alternatives
- Focusing on seed quality - fundamental input

Hurdles in the shrimp sector progress

- High feed cost and low crop success rate due to pathogens.
- High operational costs due to high cost of funds
- Low institutional financing for working capital & Capital expenses
- Low fund availability adoption of new technologies.
- Inconsistencies in seed genetics.
- Currently available genetics not capable of battling emerging diseases
- Lack of domestic market to absorb the international price shocks

Technology adopted in Shrimp retailing

- Over 97% of shrimps sold through wet market *
- Online & offline retailers and others only 3% *
- Big potential for leveraging e-commerce as shown by FreshtoHome
- Indian domestic market - Huge potential UNTAPPED
- Major disruption in market penetration awaited - Everyone loves shrimp!!

*data source Freshto Home

What is the plan by PFFI?

- ◆ Establishment of a SUBSTANTIAL domestic market for shrimps in India.
- ◆ Aim to ensure consistent availability, quality and pricing of shrimp products.

Why are farmers doing this?

- ◆ Support Indian shrimp farmers - stabilising prices and ensuring consistent market demand.
- ◆ Benefit consumers including households and HORECA through genuine products at honest prices

How do we plan to do this?

- ◆ Set up seamless distribution network to push huge volumes of shrimp
- ◆ Set up 10 Farmer Organisations (FPO / CoOp / Company) by the Corporate style shrimp producers in AP. - Pilot project
- ◆ FO's will sell 100 tons of shrimps per day - 30,000 tons per annum.
- ◆ Central processing hubs and satellite distribution centres - Hub-and-spoke model.
- ◆ Use refrigerated / Insulated trucks for quality transportation.
- ◆ Stringent quality checks at every stage

How?.. continued

- ◆ Direct farmer supply ensuring superior freshness and genuine product (no soaking)
- ◆ Elimination of middlemen to reduce costs and maintain affordable, stable prices.
- ◆ Expand and scale up to 300,000 to 500,000 metric tons by targeting 100 smart cities through 100 FO's.
- ◆ Bring in investments over ₹1,000 cores in CapEx and ₹10,0000 crores business opportunity in the Indian Shrimp sector.
- ◆ Meet the growing consumer demand for high-quality shrimp products across India.

Shrimp experience centres



Product types

- ◆ Fresh whole shrimps chilled in ice
- ◆ Live shrimps
- ◆ Frozen whole, headless and peeled shrimps
- ◆ Freeze dried shrimps

Thank you for your attention

Bala.

General Secretary

Prawn Farmers Federation of India