SUCCESSFUL WOMEN ENTREPRENEURS IN AQUACULTURE SECTORS - CASE STUDIES OF TAMIL NADU, INDIA

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• Small scale aquaculture can augment fish production and uplift the social and economic conditions of women.

• Urban male migration and other social problems have led to an increased number of permanently or temporarily women headed households.

• Women’s roles in aquaculture vary greatly according to caste, religion and position in the family hierarchy.
Need for this study

- This study has made considerable effort to capture the existing and latent entrepreneurial talents of women in fisheries and aquaculture in Tamil Nadu, India.

- Women are very active in aquaculture, but we have never been able to answer accurately the question which is repeatedly asked of us, 'How many women work in the sector?'

- This study proves that women are actively engaged in aquaculture sectors.

- The case studies shows that there are opportunities to improve women's participation in aquaculture and avenues of opportunities to get more women involved.
AVENUES FOR WOMEN IN AQUACULTURE SECTOR
Objectives

• To document the success stories in aquaculture sector

• To study the socio economic status of successful women in aquaculture sector

• To develop the models for a perspective plan towards women development.
1. Women hatchery manager

- Mrs. Tamilselvi Eraniyappan, is the manager of Periyar Mud Crab Hatchery, Kancheepuram District, Tamil Nadu.

- Mrs. Tamilselvi Eraniyappan, possess good leadership qualities. Twenty women employees work under her supervision.

- She is having a strong expertise in fresh water prawns and hatchery production of mud crabs.

- She is having a good knowledge in brood stock maintenance, induced maturation, spawning / hatching, larval rearing, live-feed culture, post-larval rearing, maintenance of biological stock, seawater supply system, air-supply system, cleaning of brood stock and larval tanks and monitoring of water quality parameters.

- Mrs. Tamilselvi Eraniyappan, is a Jamsetji Tata National Virtual Academy (NVA) Fellowship awardee for the year 2007.
2. Women crab farmer

- Mrs. Sussammal Nazareen is the first woman crab farmer in Tamil Nadu who is culturing mud crabs in a water spread area of 250 acres consisting of 25 ponds.
- She is having an experience of 15 years in crab farming.
- Crab farming is being done for 9 months in a year.
- Farming is being done in earthen ponds with varying sizes from 0.1 to 1.0 ha. and with a depth of 2-6 ft.
- Water crabs with a size ranging from 50g - 750 g are stocked in each pond. Water crabs are purchased @ Rs. 75 - 180/kg.
- Trash fish is fed @ 10 % of the body weight of the crabs.
- Crabs are harvested by hand picking and sold in live condition to the exporters.
- Mrs. Susammal Nazareen, is a role model in the village and plays a major part in community development.
3. Women Crab farmer  
(Crab fattening in FRP Cages)

- Women Self Help Group consisting of 15 members are engaged in mud crab fattening in fiber glass cages at Kancheepuram district, Tamil Nadu, under the leadership of Mrs. Arulselvi.

- Fiber glass cages with 6 and 9 compartments are used for crab fattening. Each compartment was stocked with 6 crabs each weighing 500g - 700g.

- The four sides of the cages are well perforated for free circulation of water.

- Trash fish collected from the landing centers are fed @ of 10% of the biomass of the crab. Feeding was done twice a day.

- Harvesting is carried out by hand picking and also by using scoop net.

- The water crabs weighing 500 g - 1000 g were purchased @ of Rs.180 - 220 per kg and hardened crabs weighing 700 g - 1000 g and above were sold @ Rs. 500/- to Rs. 800/- per kg.
4. Woman crab farmers
(Crab fattening in pens)

• Smt. S. Jayabarathi, is the leader of 'Annai' Women Self Help Group. She lives in Kattur Village, Tamil Nadu.

• Crab fattening is carried out by Mrs. S. Jayabarathi and her group in small pens with fence ranging from 100 to 200 m² in size with water depth of 1.5 m.

• Water crabs in the size range of 350 to 1500 g are stocked @1 to 3/m³.

• Crab fattening takes about 3 to 4 weeks.

• Crabs are fed with bivalve meat or trash fish daily at the rate of 5 to 10% of body weight.
Harvesting is done using scoop nets and ring nets with baits.

This group is having good savings in the local commercial bank. This bank has also provided this group with bank loans for crab fattening activities.

Each day she and her group of 12 members walk more than 4 km to reach the work spot.

Mrs. S. Jayabarathi has strived hard to bring in diversification in livelihoods among her co-members.

The experience of Mrs. S. Jayabarathi and her group illustrates how the SHG concept can be a tool to improve the living standards not only of women members but of the whole community.
Mrs. Manickavalli, heads a WSHG at Cuddalore, Tamil Nadu.

Mrs. Manickavalli and her group are having an experience of 3 years in crab fattening in concrete tanks.

A concrete tank of 10 ft x 6 ft x 5 ft is used for stocking the water crabs.

Sixty six water crabs weighing 23 kg of size 300 – 400g are stocked @ of 6nos/tank.

Water level is maintained upto 2.5 ft and water exchange is done daily.

The culture period was 45 days.

Trash fish @ 10% body weight of the crab was given as a feed. Feeding was done twice a day.
6. **Women crab exporter**

Mrs. S. Vijaya is a manager of Madras Sea Food Exports at Chennai.

She is supported by her husband.

She is having 5-6 years of experience in crab exports.

She purchases both water and hardened crabs from Orissa, Andhra Pradhesh, Tamil Nadu Karnataka, Kerala, Maharashtra and Andaman.

1 - 2 t (600 kg crabs) of crabs are exported to different places from her company daily.

Fattened crabs are sold to domestic markets in Mumbai and New Delhi and to international markets at Singapore, Taiwan and Bangkok.

Despite being only primary school educated, Her innovativeness, self confidence, keen interest has led her to thrive in this business
7. Woman shrimp farmer

Mrs. R. Swarnalatha, Nagapatinam district, Tamil Nadu is a BS.c (Home Science) graduate.

She has got good expertise in shrimp farming and *Sea bass* farming since 1994.

She also works as a consultant for other shrimp farms located near her farm.

She also helps her husband who is a consultant for fish feed exports.

Her self interest and motivation given by family members has encouraged her to take up brackishwater shrimp farming seriously.

She is a good role model among other shrimp farmers in bringing forth their best in income earning activities.
8. Woman ornamental fish farmer

‘Ornamental Fish Culture’ is being practiced by 5 ‘Irrular’ Tribal WSHGs Near Chennai, South India.

The traditional occupation of Mrs. Vijaya and her group is catching snakes and rats.

She has strived hard to bring in diversification in livelihood among her group by making them understand that they need not depend on the income earned by their husbands alone.

Each day she and her group members work hard and have established an ‘Ornamental Fish Culture unit’ at New Perungulathur, Kancheepuram Dst.

She is a good role model among other shrimp farmers in bringing forth their best in income earning activities.
9. Women shrimp processors
(Small - scale cottage industry)

Mrs. S. Selvi, is a leader of a WSHG near Chennai, Tamil Nadu.

Twenty five coastal women SHG members headed by Mrs. S. Selvi are engaged in processing white shrimps *Fenneropenaeus indicus*.

Mrs. S. Selvi and her group members have 2 - 7 years of experience in this venture.

White shrimps *F. indicus* is used as an ingredient for making live feed for the brooders and shrimp seeds stocked in the hatcheries.

The WSHG lead by Mrs. S. Selvi are involved in the following processing steps like, collection of white shrimps from local villages, weighing the shrimps, processing and ice packing. The ice packed shrimps are supplied to the hatcheries.
10. Shrimp processing plant technicians

Mrs. Santhanalakshimi and Mrs. Thenmozhi, are pioneer technicians leading a women wage labours group at Premiere Marine Products, Liberty Groups of Companies, Mandapam, Tamil Nadu.

They are educated upto primary level.

They possess 10 -12 years of experience.

This experience has helped them to gain good knowledge in processing, packing, maintaining the official records of the workers and market techniques.

The duty of Mrs. Santhanalakshimi and Mrs. Thenmozhi begins with the collection of raw fish stocks from the marketing department in the company, taking attendance of the women wage earners, deciding the day’s work for the workers and distribution of raw materials that needs to be processed by the labourers.
Mrs. Navaneetham from Kovalam, Kancheepuram district, Tamil Nadu, is a clam collector and a clam marketing agent.

She supplies clams to hotels and to hatcheries (feed for crabs and shrimps).

The step involved in clam collection is collection of clams and meat separation from clam shells and drying the clam shells.

Only when they get an order form the hatchery or hotel they go for clam collection. The work starts at 6 am and ends at 3 pm.

The group members wear very light clothing and do not consume food when they go for clam collection in the brackish water canals or rivers.
Frequently they keep changing their areas for collecting clams. Once, they understand that the availability is less in a particular place. They visit some other area for collection.

They give a long gap and then reach the original area for clam collection. By this they help in the growth of clams.

Mrs. Navaneetham and her group members move in rows in the brackish water canals or rivers.

Though they know swimming they only swim to a shallow depth area in the water and by experience they can identify the areas where clams are available in the canals or rivers.

Only when they return to the shore they have there food or even skip their food because of nausea feeling created by swallowing the brackishwater in the canal or river.
They often get hurt on the feet and palms due to sharp mussel shells found in the bed of the water bodies.

Tolerating these wounds they continue they work.

She rides motor bikes and travels 60 km per day to supply clam meat to hotels and hatcheries.

She gives employment to more than 100 women in the village through this enterprise of clam meat collection.

She plays a vital role in the community development and capacity building of rural coastal women.

She is a role model to other women in this field of clam collection.
12. Women fish meal processor

Mrs. Vijayanthimala and her group reside near (Pulicat Lake), Tiruvallur district, Tamil Nadu.

They are fish meal processors. She is an expert in fish meal production. Fish meal production process involves trash fish drying, storing, powdering, sieving, drying and packaging.

Fish meal prepared by this group is supplied to the fish traders in the city.

Fish meal is produced with the savings money of the group and the profit is finally shared among the group.

She possesses good leadership qualities, dynamic character; good knowledge in the subject of fish feed preparation, self-confidence and perseverance.

She provides employment opportunity to many women in the village.
13. Aquaculture accessories business manager

Mrs. R. Revathy is the Managing Director of Shri Hariharan Aquatech, Chennai.

She is having an experience of 10 years in this aquaculture accessories business.

She is supported by her family members and friends in managing this business.

Mrs. R. Revathy supplies aqua products required for shrimp farms, crab farms and hatcheries in Tamil Nadu, Andhra Pradesh, Kerala and Karnataka in India.

Mrs. R. Revathy, has emerged as a successful women entrepreneur in the field of aquaculture accessories business management.
- MODEL -
FACILITATING FACTORS AND PARTICIPATORY BENEFITS FOR WOMEN IN AQUACULTURE

- Micro facilitating factors -
- Macro facilitating factors -

- Small family size
- Joint family system
- Primary school level education
- Need to have an alternative livelihood
- Goal to have better standard of living
- To occupy time usefully
- Aquaculture is our traditional occupation
- Cooperation among the group members
- Family support
- Confident
- Financial Institutions Support
- Government Institutions Support
- Research Institutions Support
- Local NGO's Support
- Community support
- Efficient utilization of community resources
- Empowered women
- Community development
- GDP & Economic development

- Better family status achieved
- Healthy society
- National development
Conclusion

These women have demonstrated their ability to work successfully at all levels of the sector, it is important to continue to construct an environment conducive to their greater participation and benefit.

More opportunities must be created. This can best be achieved at the global level, predominantly through the collection and dissemination of information and the transfer of technology between countries.

It is important that these case-studies, not only to highlight the participation of women at all levels but also identifies and resolves recurring issues that determine the successes and failures as foundation for formulating and planning future programmes for women.
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