

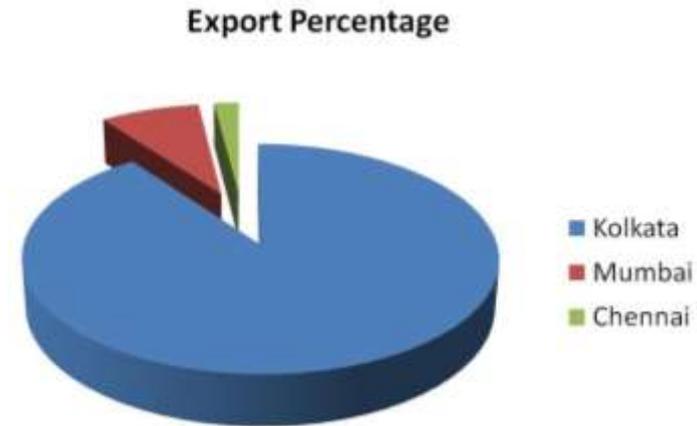
BREAKING BARRIERS AND BUILDING LIVELIHOODS: WOMEN PARTICIPATION IN ORNAMENTAL FISHERIES FOR SUSTAINABLE DEVELOPMENT



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BACKGROUND

- **Women Empowerment & Gender Equality:** Involves self-respect, decision-making, access to resources, and influencing change, essential for making economically independent and self-reliant
- **Opportunities in Ornamental Fisheries:** Growing national and international demand, compatible with household responsibilities, promising alternative livelihood
- **Economic Potential:** Domestic trade (2017–18): ₹500 Crore; World export market (2019): 0.4% (US\$ 1.5M) of global share; India's global ranking: 31st



West Bengal: The Ideal Hub for Ornamental Fishery

Favorable Climate

Kolkata and surrounding districts offer optimal conditions for year-round fish cultivation

Strong Local Markets

Established distribution networks and growing consumer base provide ready access to buyers

Cultural Foundation

Deep-rooted aquaculture traditions create supportive ecosystem for fish farming ventures

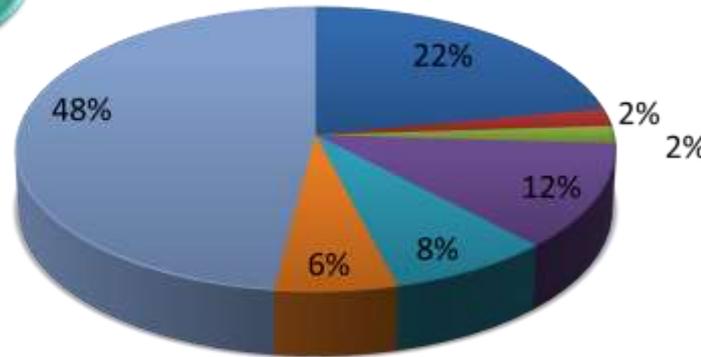


Why Ornamental fishery?

- Requires little space and less initial investment.
- Less technical knowledge required.
- Can be practiced in urban areas with little alteration of backyard or roof of a house.
- Less manpower is needed, the women or the elders can run small home aquarium units.



Women Participation in Ornamental fishery



- Ornamental fish culture / farming / rearing / trading
- Ornamental fish purchase and retail
- Ornamental fish capturing from local river and sale to exporter
- Making accessories for Ornamental fish rearing
- Making accessories decorative items for aquarium
- Packaging of accessories / feed for O. F. and supply to market
- Contract worker for making accessories for Ornamental fish

- Ornamental fish culture / breeding / farming / rearing / trading
- Indigenous Ornamental fish collection from local river and sale to exporter
- Ornamental fish purchase and retail

Ornamental fish culture and marketing



- Aquarium plant collection and propagation
- Live fish food collection and culture
- Artificial fish food preparation

Ornamental fish feed preparation and selling



- Aquarium decorative accessories preparation
- Making accessories for Ornamental fish rearing
- Contract worker for making accessories for Ornamental fish

Aquarium & Accessories making and selling

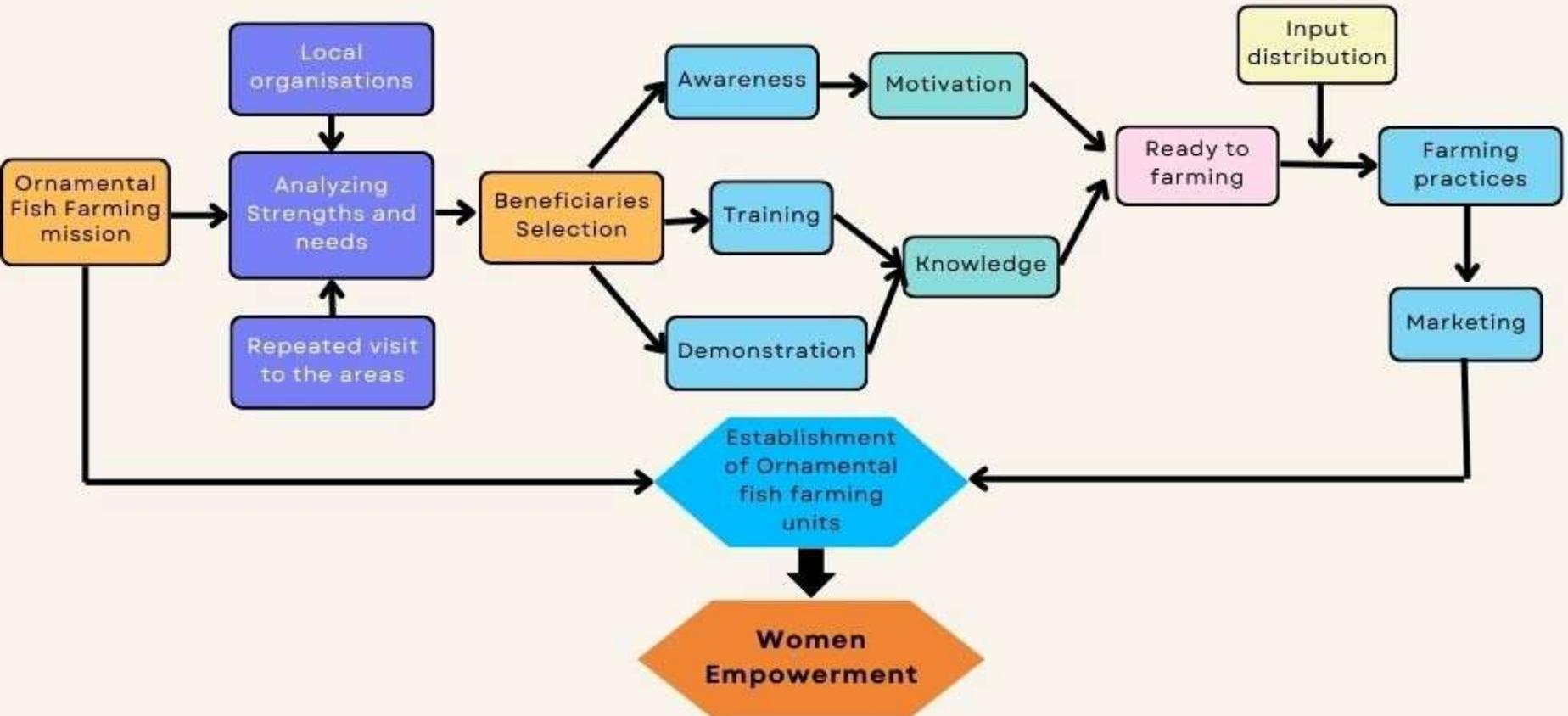


- Packaging of accessories / feed for ornamental fish and supply to market
- Packaging of ornamental fish and transport
- Domestic and export marketing of ornamental fish, feed and accessories

Office maintenance by Women Entrepreneurs



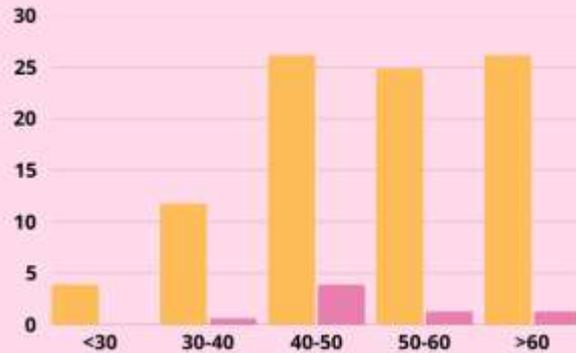
Framework for Developing Ornamental Farming Clusters



* A framework prepared by ICAR-CIFRI, India

Demographic Profile of the Respondents

Age & Societal Status



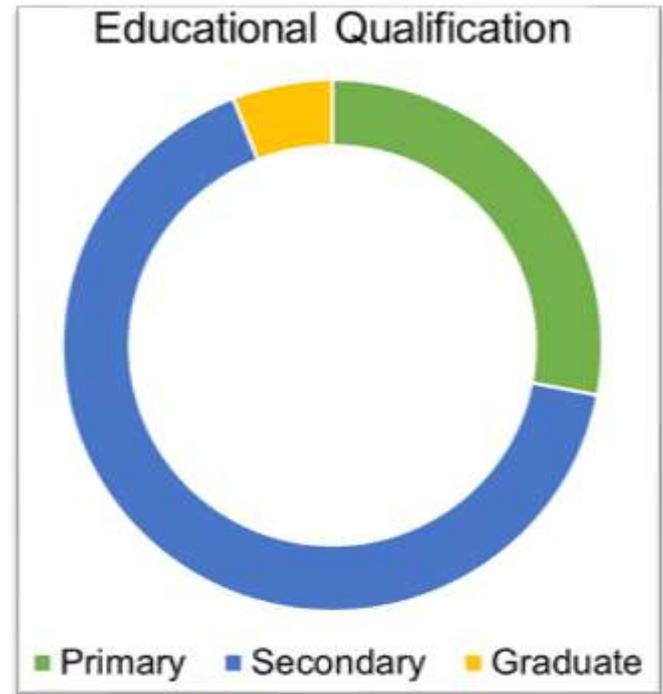
Having adults & grand-children
31.4%



Teenagers & just married
21.8%

Having kids
39.3%

Educational Qualification



■ Primary ■ Secondary ■ Graduate



Reasons for adoption

Reasons for Adoption	R A N K S						
	1	2	3	4	5	6	7
Ease of work and convenient timing	12	52	36	Nil	Nil	Nil	Nil
Regular and growing income potential	6	18	36	26	8	6	Nil
Family enterprise	2	Nil	2	10	18	66	2
Social relationships strengthened	Nil	Nil	2	8	62	22	6
Improvement in social status	Nil	12	16	52	10	2	8
Incentives provided by the Govt.	Nil	4	2	12	4	8	70
Gender friendly	58	20	16	6	Nil	Nil	Nil

Minimum Income from Ornamental Farming

Single Tank of rearing unit
(500 Lt)

- Rs. 1000/Month

Above 10 tanks of rearing
unit (500 Lt)

- Rs. 5000/Month

Breeding of Live-bearer
(Single unit)

- Rs. 750/Month

Breeding of Gold fish or Koi
carp (Single unit)

- Rs. 3000/season

Making of Aquarium
accessories

- Rs. 500/Month

Contract workers in
ornamental industry

- Rs. 2000/Month



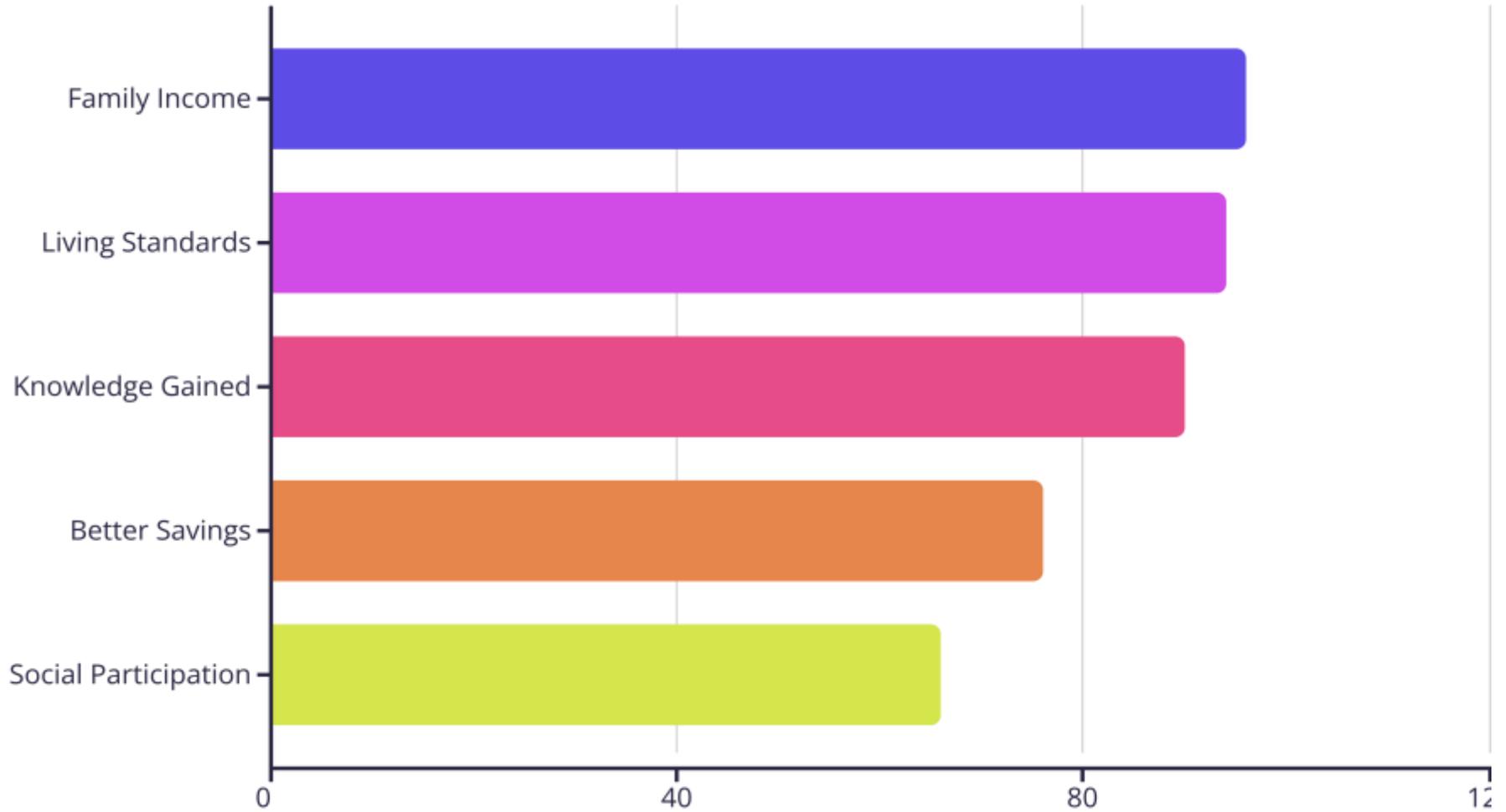
Investment and Monthly Income of Women

Average Initial investment (Rs.)					Average Monthly Income (Rs.)				
Mean	Range		SD	CV (%)	Mean	Range		SD	CV (%)
	Max	Min				Max	Min		
67,000	300,000	10,000	114,463.97	1.71	3,465	41,600	500	5,662.97	163.43

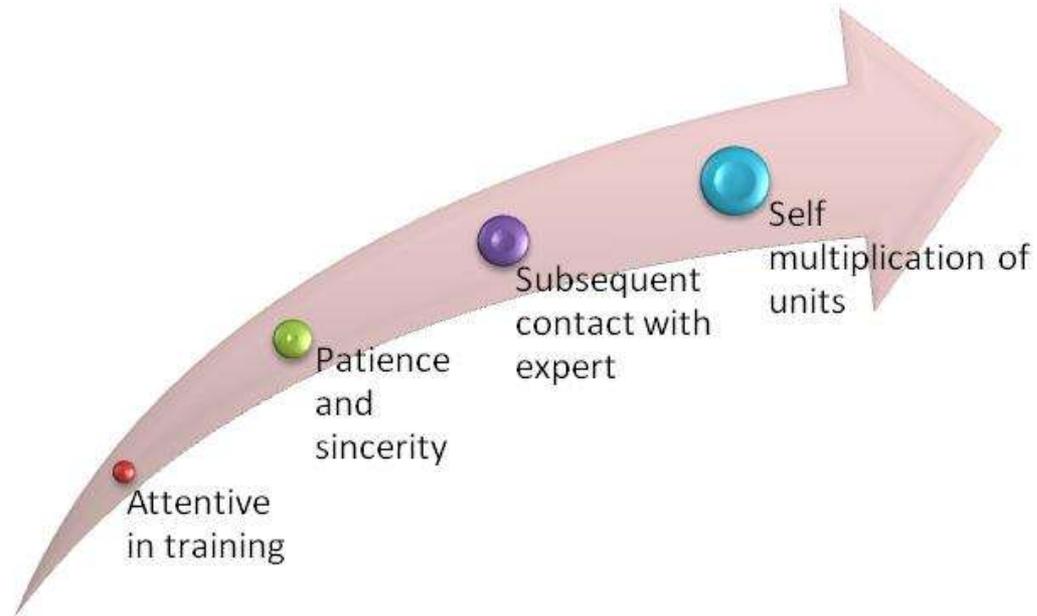
Annual Income of Women



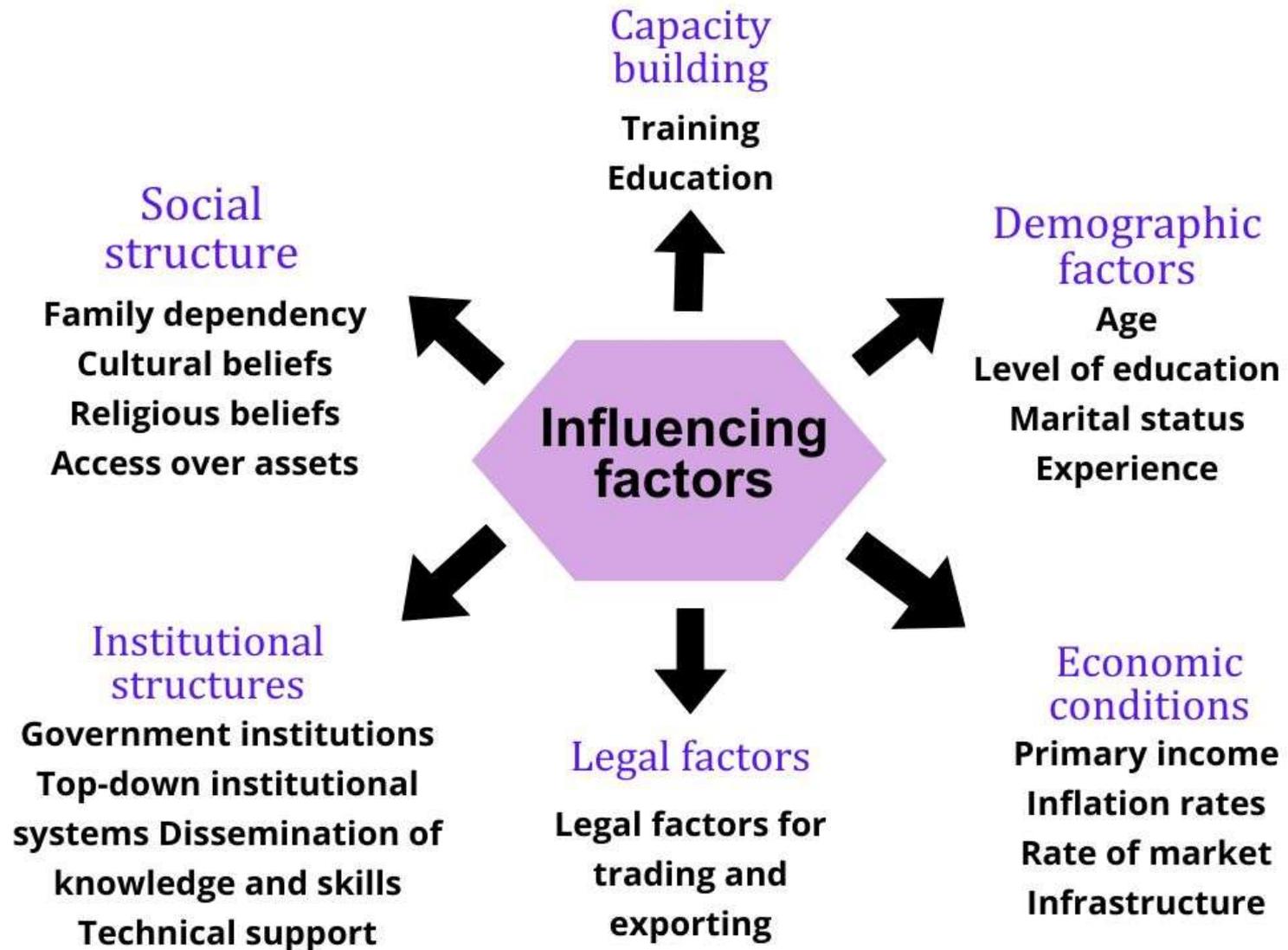
Remarkable Economic Gains



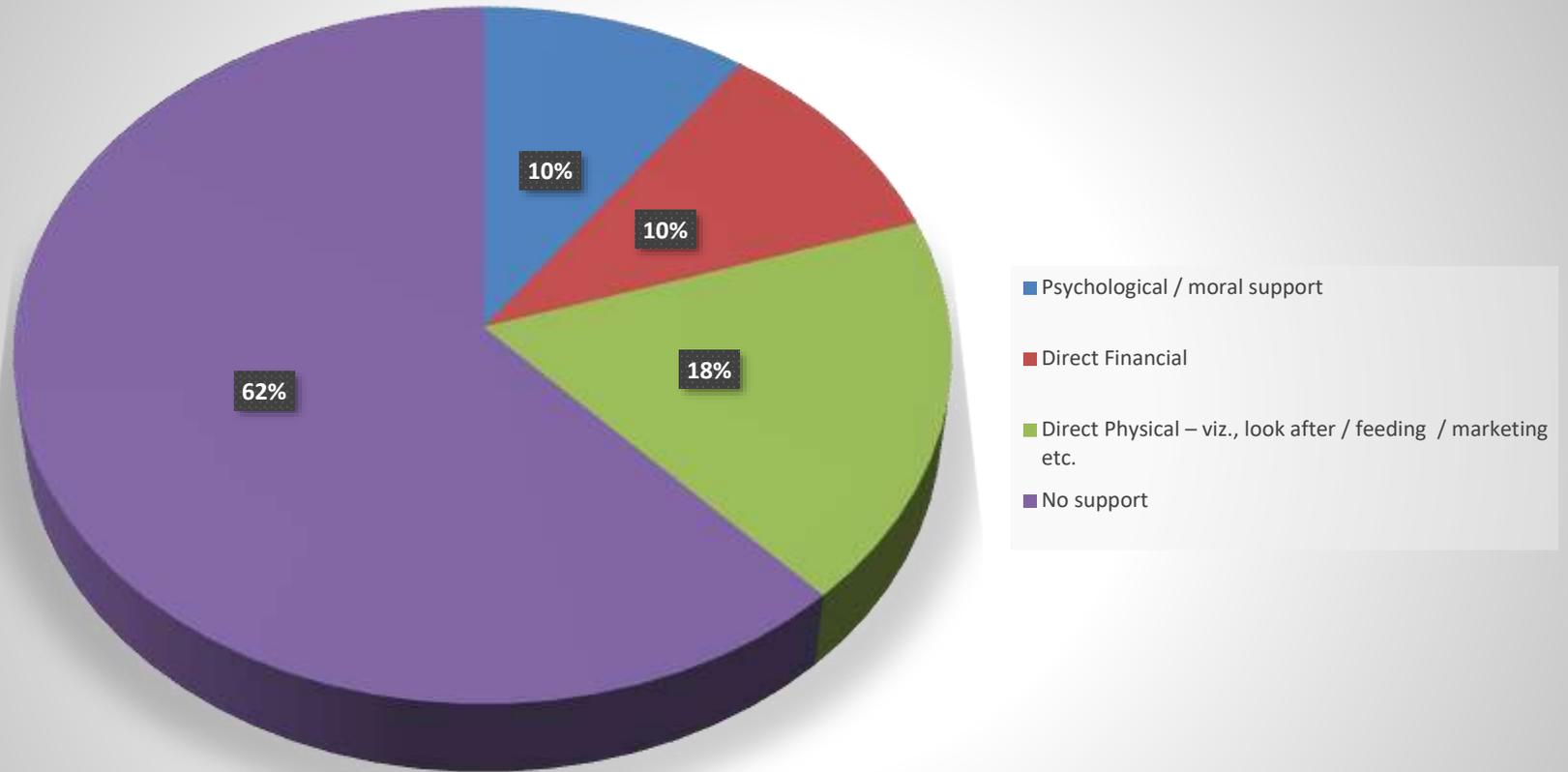
Ladder of Success



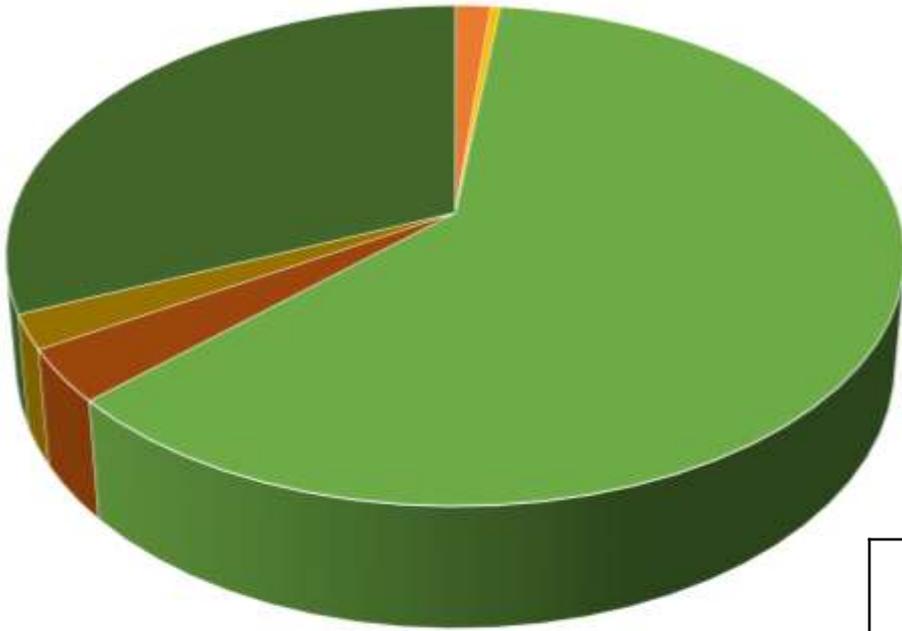
Influencing factors for successful Ornamental Entrepreneurship



Support from other family members



Credit Taken by Women traders



■ Friends
 ■ Relatives
 ■ Money lender
 ■ Trader
 ■ Bank
 ■ NGO

Descriptive Statistics		Amount Borrowed (Rs)	Credit Period (Month)	Interest Rate (%)
Mean		14,437.50	39	14.8
SD		13,069.70	37.26	0.45
RANGE	MAX	30,000.00	84	15
	MIN	500	12	14
CV% [SD/Mean x 100]		90.52	95.54	3.04

Constraints Faced

Lack of self-confidence

Socio-cultural barriers

Lack of free mobility

Lack of knowledge in fish culture

Improper knowledge in business

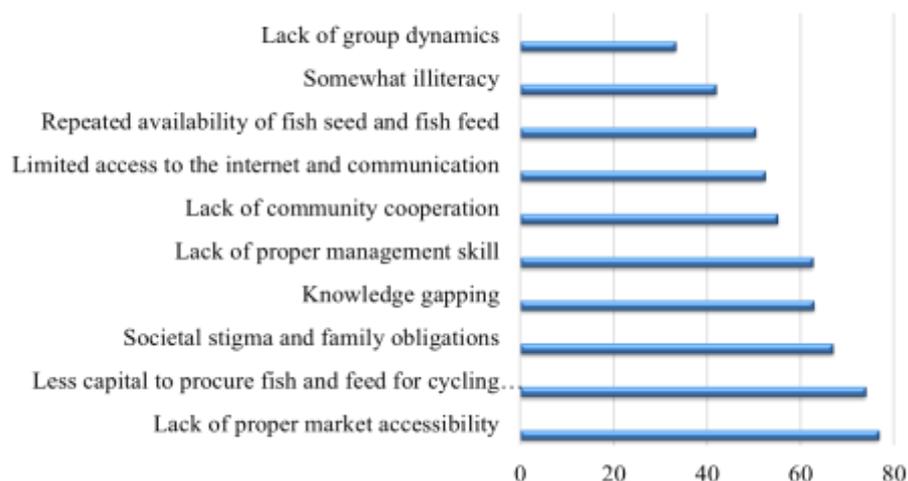
Insufficient financial support

Family obligations

Limited access to networks

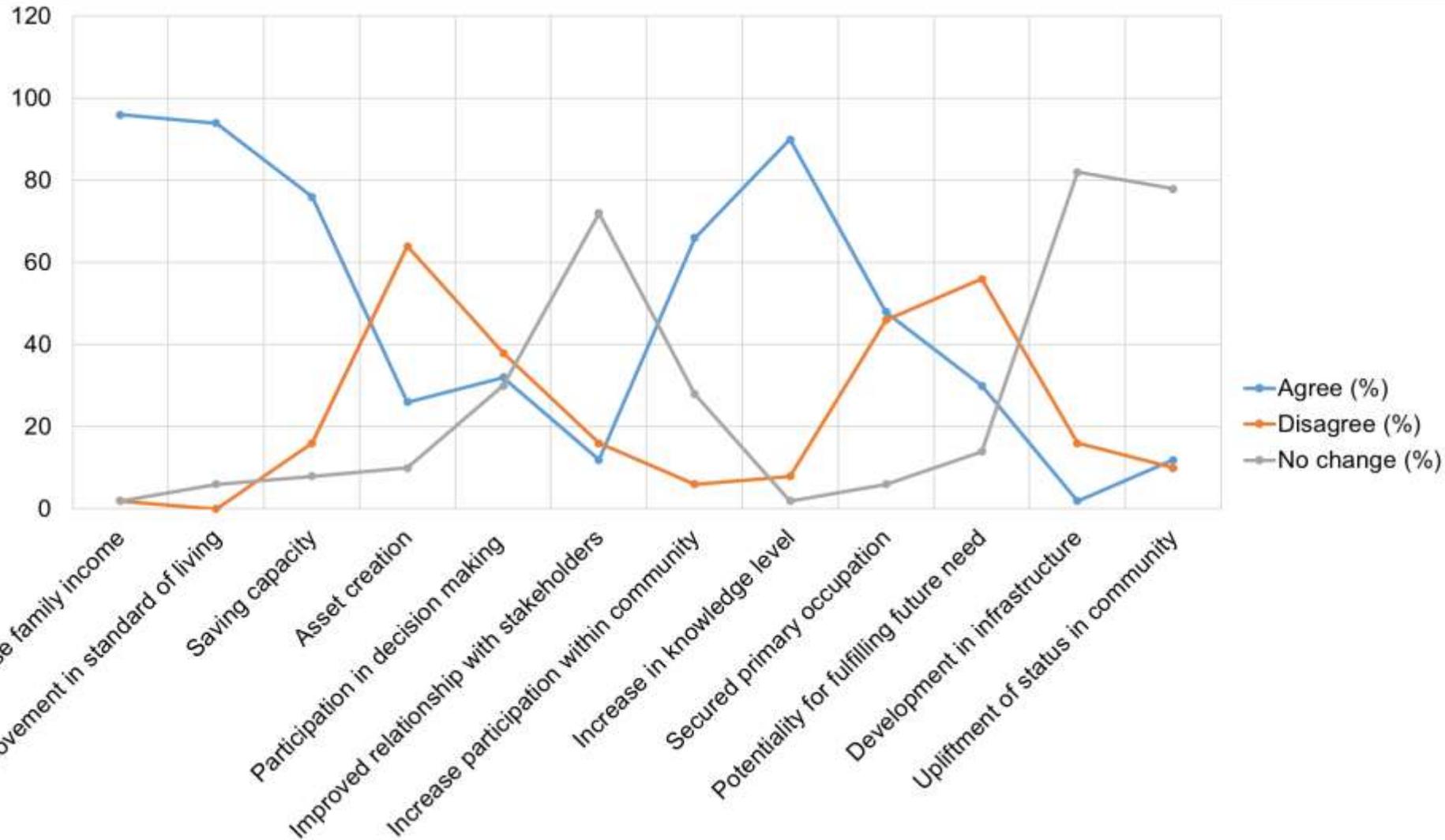
Response to constraints

Respondant's Percentage



Sl. No.	Constraints	Rank
1.	Lack of proper market accessibility	I
2.	Less capital to procure fish and feed for cycling operation	II
3.	Societal stigma and family obligations	III
4.	Knowledge gapping	IV
5.	Lack of proper management skill	V
6.	Lack of community cooperation	VI
7.	Limited access to the internet and communication	VII
8.	Repeated availability of fish seed and fish feed	VIII
9.	Somewhat illiteracy	IX
10	Lack of group dynamics	X

Socio-economic Development



Persistent Challenges for Women

Limited Decision-Making

Only 32% reported improved decision-making power within households and businesses

Financial Insecurity

Just 30% achieved greater financial security despite income increases

Asset Creation Gap

Only 26% succeeded in building meaningful assets or property ownership

82%

Infrastructure

No improvement in basic infrastructure access

70%

Social Status

Unchanged social recognition and community standing

70%

Stakeholder Engagement

Limited involvement with key institutions and decision-makers

Ornamental Fishery for women empowerment

SWOT ANALYSIS

Positive

Negative

Internal

Strengths

1. Less working capital
2. Home operated farming and business
3. Less infrastructural requirements
4. Less time consuming
5. Less laborious

Weaknesses

1. Production output not predictable
2. Lack of technology transfer
3. Poor knowledge on advance technique
4. Poor marketing
5. Requires high maintenance
6. Restricted market areas

External

Opportunities

1. High domestic demand
2. High price
3. Tax incentives
4. Wide variety of species
5. Export market
6. Govt. initiatives

Threats

1. Lack of expertise in Diseases and treatment
2. High competition
3. Large exporters
4. Family obligations
5. Insufficient fund supply

Essential Interventions Needed



Training Programs

Comprehensive skill development in fish farming, business management, and financial literacy



Technology Support

Access to modern equipment, digital platforms, and technical assistance for scaling operations



Institutional Engagement

Stronger connections with banks, cooperatives, and government programs for sustained growth



Policy Reforms

Gender-responsive policies addressing land rights, credit access, and market participation

Technological Intervention



Transferring knowledge



Hands on training



Farm visit for giving motivation



On Field demonstration

Initiatives for Encouraging

- Through PMMSY scheme the Prime Minister of India give special focus on ornamental fish cultivation for employment generation.
- World Bank, Government sectors, NGOs, SHGs, Co-operatives and others should come forward and sponsor in depth studies and unit establishment, so that more and more fisherwomen can be brought into ornamental fishery sector for their betterment.
- More opportunities need to be created for women, predominantly through dissemination of information and transfer of technology between different states as well as between countries.



Pathway to Sustainable Development

Supporting women in ornamental fisheries offers a proven pathway to inclusive development, combining economic empowerment with environmental sustainability for lasting social change.



SDG 1: No Poverty

Creating sustainable livelihoods that lift families above the poverty line



SDG 5: Gender Equality

Empowering women with economic independence and decision-making power



SDG 8: Decent Work

Providing dignified employment opportunities in the growing blue economy

Empower. Sustain. Thrive.

