

GENDER ROLES AND LIVELIHOOD STATUS OF ORNAMENTAL FISH PRODUCERS IN MAHARASHTRA STATE, INDIA

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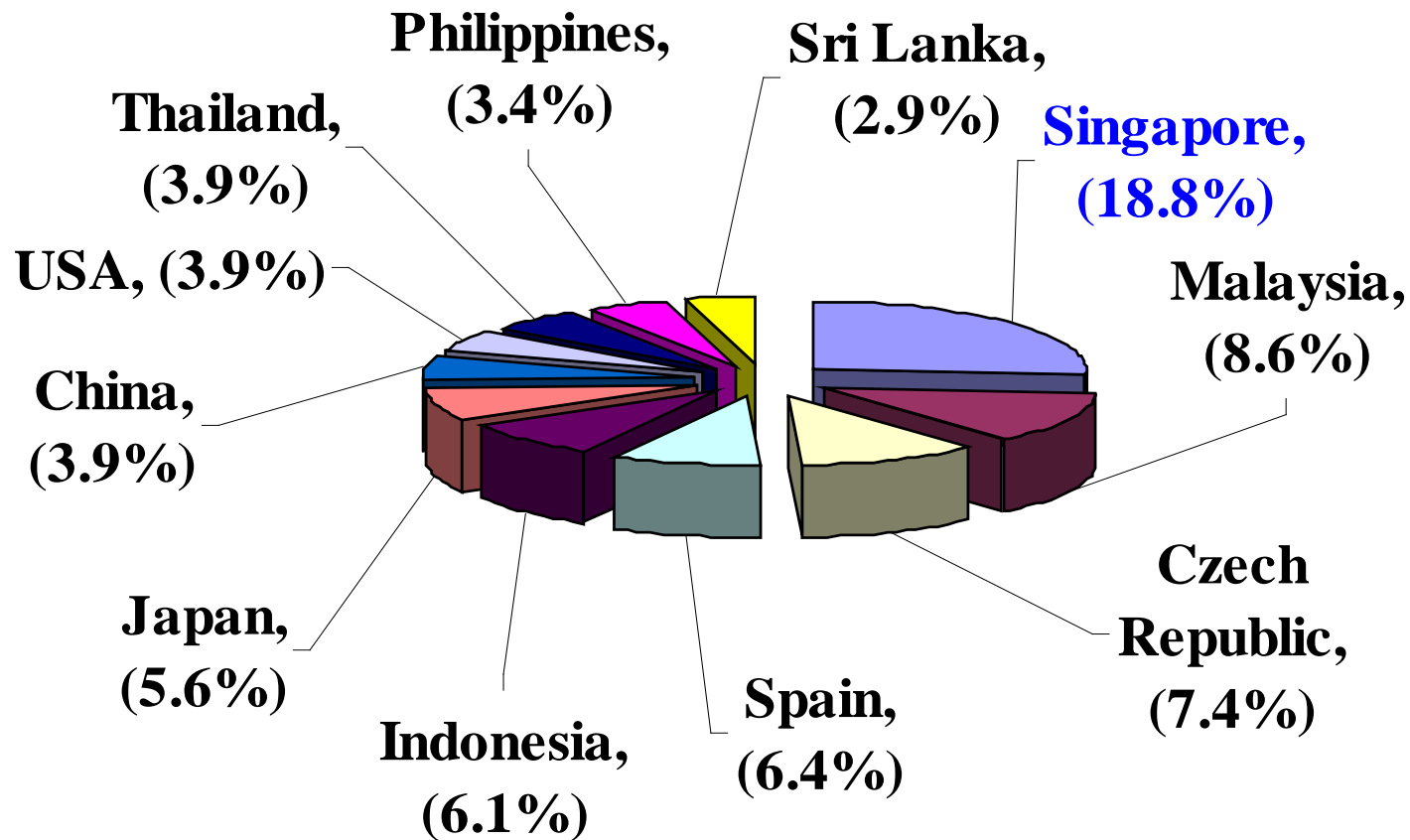
Current Situation in Ornamental fish business

- Ornamental fish sector is a lucrative and emerging business in aquaculture industry
- Popular hobby in the world
- The entire industry, including accessories and fish feed is estimated to be worth **US \$ 16 billion**. (MPEDA, 2014)
- The largest importer of ornamental fish is the USA followed by Europe and Japan.
- More than 60% of exports come from Asia



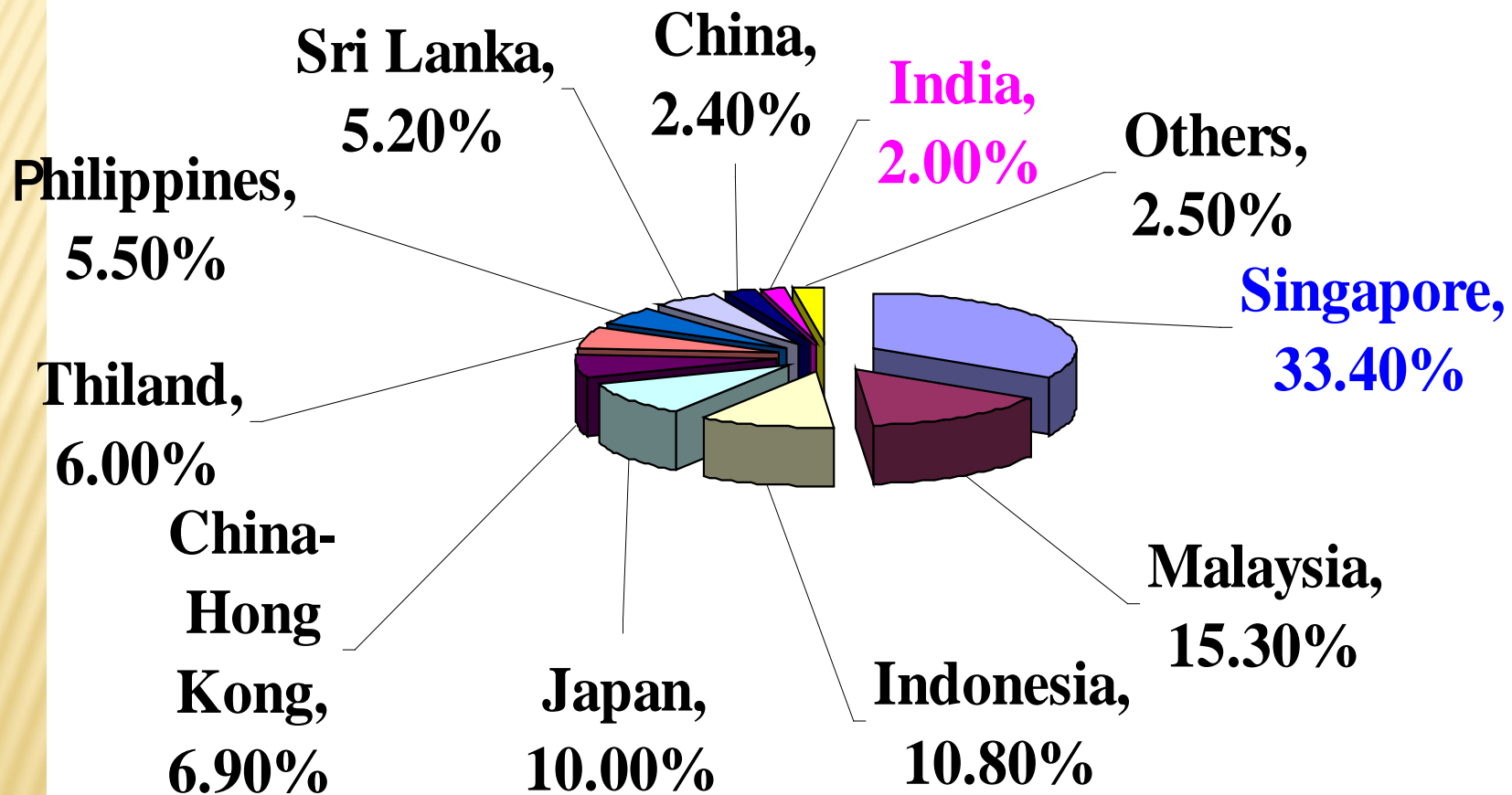
Overview of Ornamental fish market scenario

WORLD ORNAMENTAL FISH TRADE



Overview of Ornamental fish market scenario

WORLD ORNAMENTAL FISH TRADE – Asian countries



In India;

- **Ornamental fish sector, 60 % fishes are caught from wild sources**
- **Export of ornamental fish is 55 million (MPEDA, 2014)**
- **Domestic trade grows 20 % annually**
- **In India, Household aquarium keeping is 0.04 %; in USA and Europe it is 15 -20 % (MPEDA, 2014) .**
- **In Maharashtra, 8 % of ornamental fish export is from Mumbai and rank second in trade from India**
- **Fish supply - West Bengal, Tamilnadu and imports from South East Asian countries**
- **450 breeding and rearing units mainly in Konkan and Western Maharashtra regions.**

Development scheme by Marine Product Export Development Authority (MPEDA)

MPEDA – Rainbow revolution assistance scheme (till 2015)

Specification	Group targeted	Maximum Subsidy (Rs.)	Capital investment (Rs.)	Annual production (approx no of fish)
Grade-I	Small scale (cluster with min. 5 individual beneficiaries)	75,000/- per beneficiary	1,50,000	50,000
Grade-II	Medium scale (Individuals)	2 lakh/- per unit	4,00,000	2,00,000
Grade-III	Large scale (Individuals)	7.5 lakh/- per unit	15,00,000	5,00,000

GENDER IN FISHERIES :

- **45% of the world's population depends on agriculture, forestry fishing for their livelihoods**
- **Women constitute 43 per cent of the agricultural labor force producing a large portion of the world's food crops (FAO, 2011)**
- **China and India, women represented a share of 21 percent and 24 percent, respectively, of all fishers and fish farmers**
- **In India, approximately 1.8 million people are employed in net mending, trading, preservation, peeling, curing, marketing fish, purchasing, handling, drying, filleting, displaying, and fish-selling activities, with women forming 48 % of this total labor force (Nag et al. 2012).**

- Women's invaluable contribution is often **overlooked and undocumented**
 - **Access to key productive resources** like land and services like credit and extension is minimum
 - **Wage discrimination** in rural labour markets, Part-time, seasonal, low-paying jobs when engaged in rural wage employment
 - Women work **without remuneration** on family farms
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Objectives

- 1.To study the profile of ornamental fish producers in Maharashtra.
 - 2.To study the livelihood status, gender roles and needs of the ornamental fish producers.
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Methodology:

Sample size:

- 30 ornamental fish producers

Data collection:

- Primary data
 - Key informants interviews
 - Sample respondents interview
 - In-depth interviews
- Secondary data

Data Analysis:

Descriptive analysis and ranking method

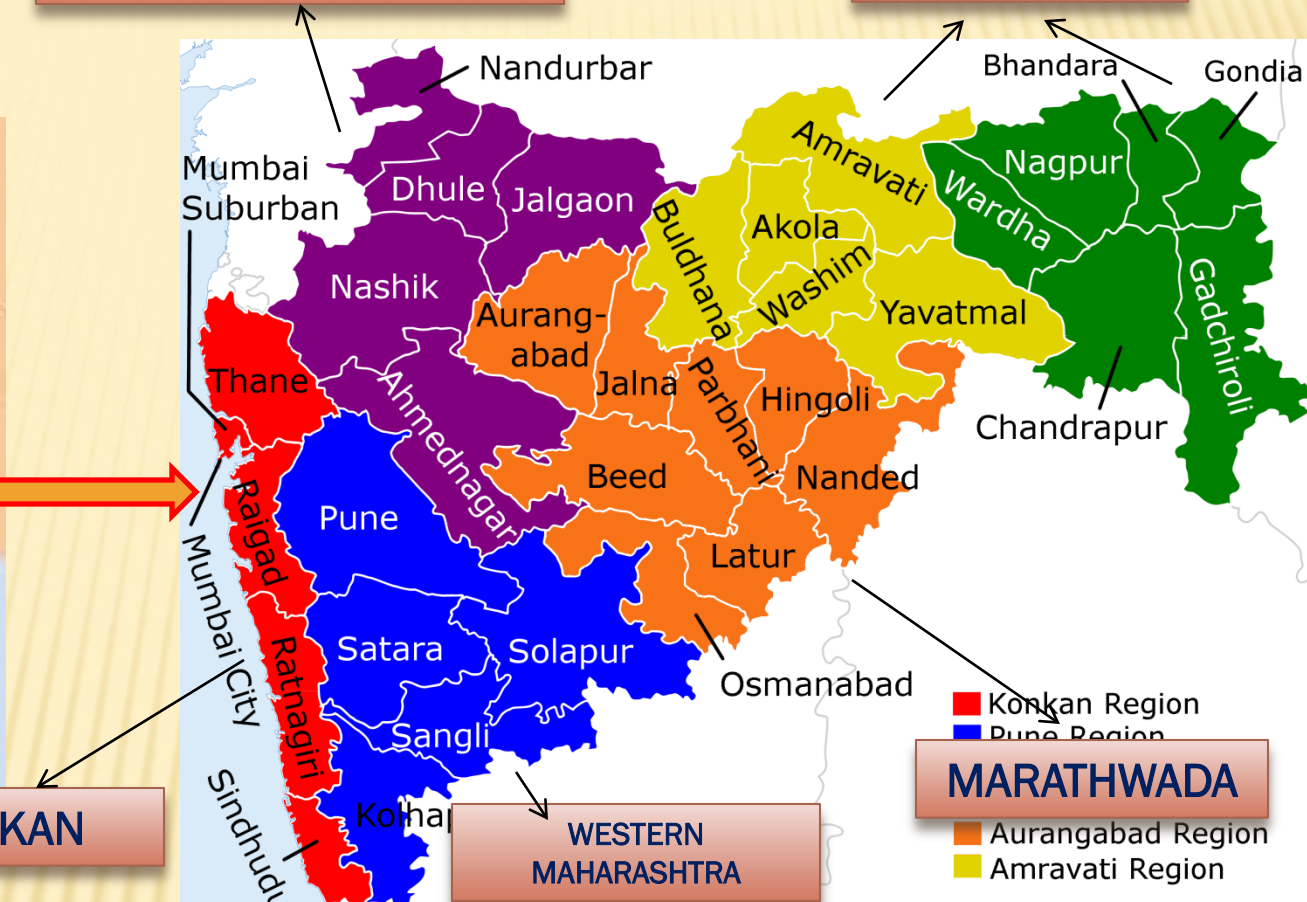


STUDY AREA :



NORTH MAHARASHTRA

VIDARBHA



KONKAN

WESTERN MAHARASHTRA

MARATHWADA



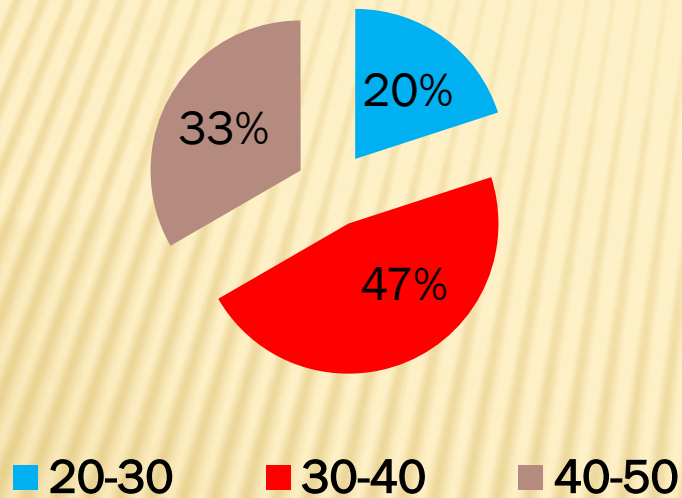
**WESTERN
GHATS –
UNESCO
World
Heritage
Site**



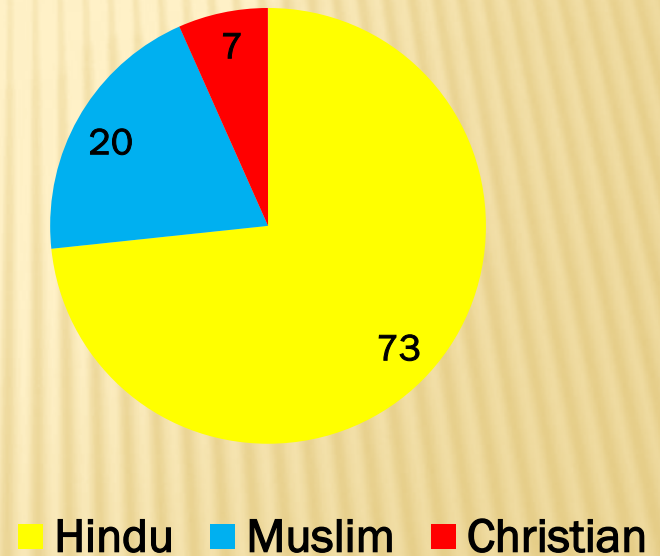
Results : Social profile of the respondents

Personal Information :

AGE STRUCTURE OF ORNAMENTAL FISH PRODUCERS

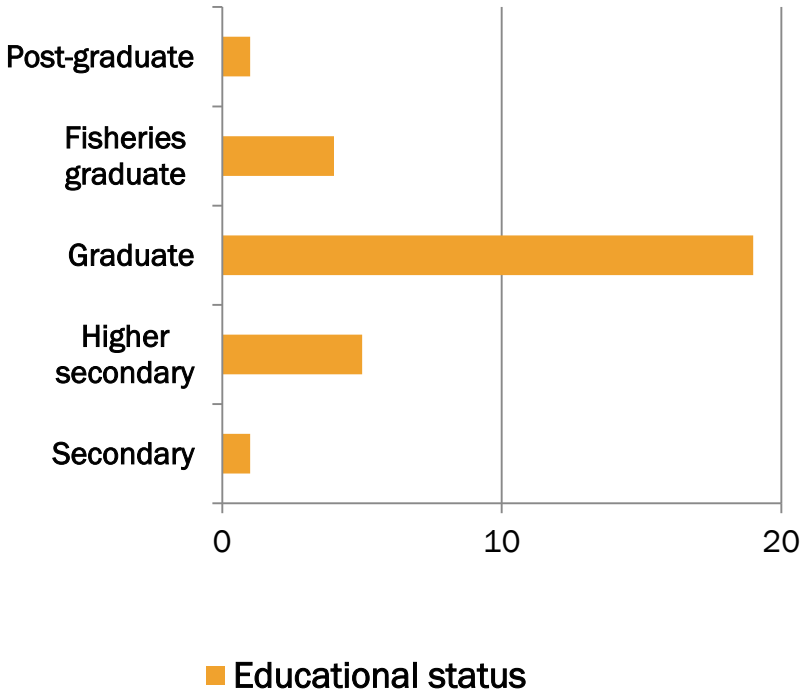


Religion

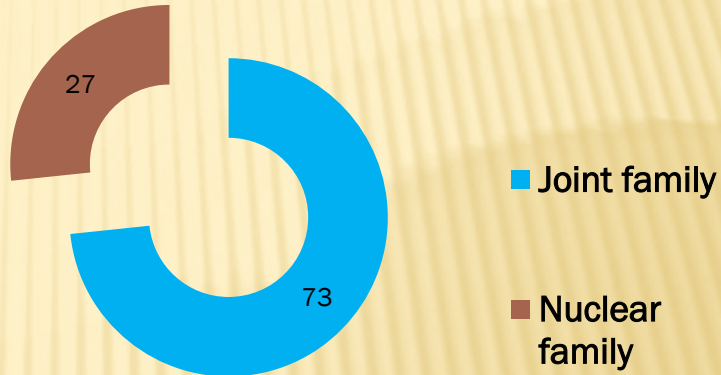


Personal Information :

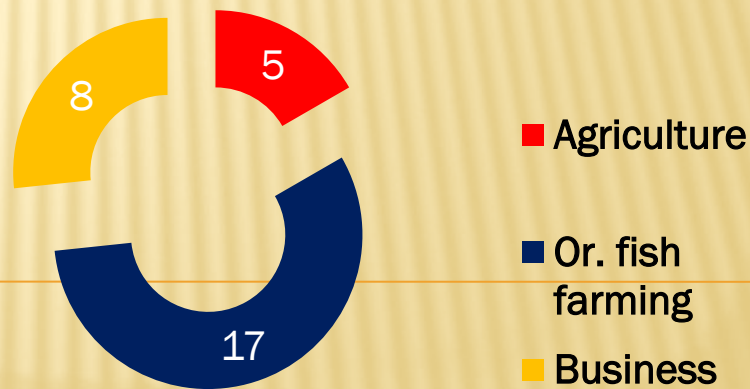
Educational status



Family type

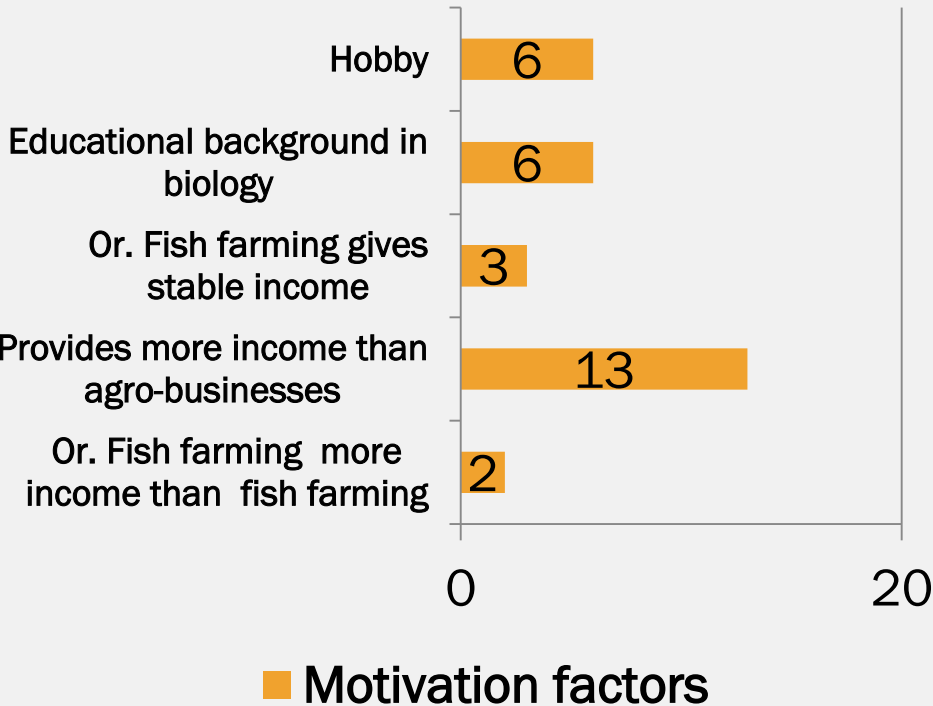


Primary occupation

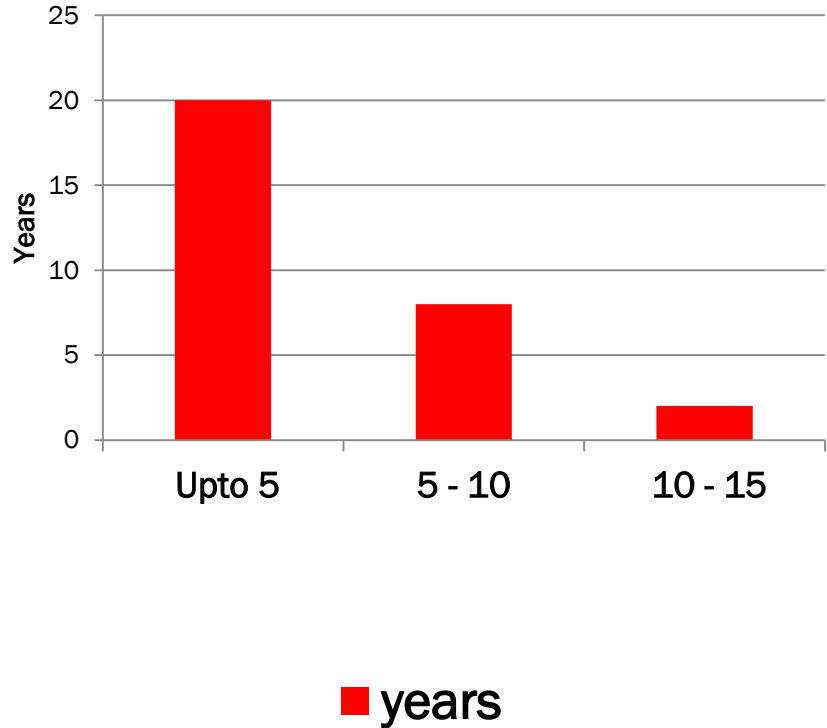


Personal Information :

Motivation factors

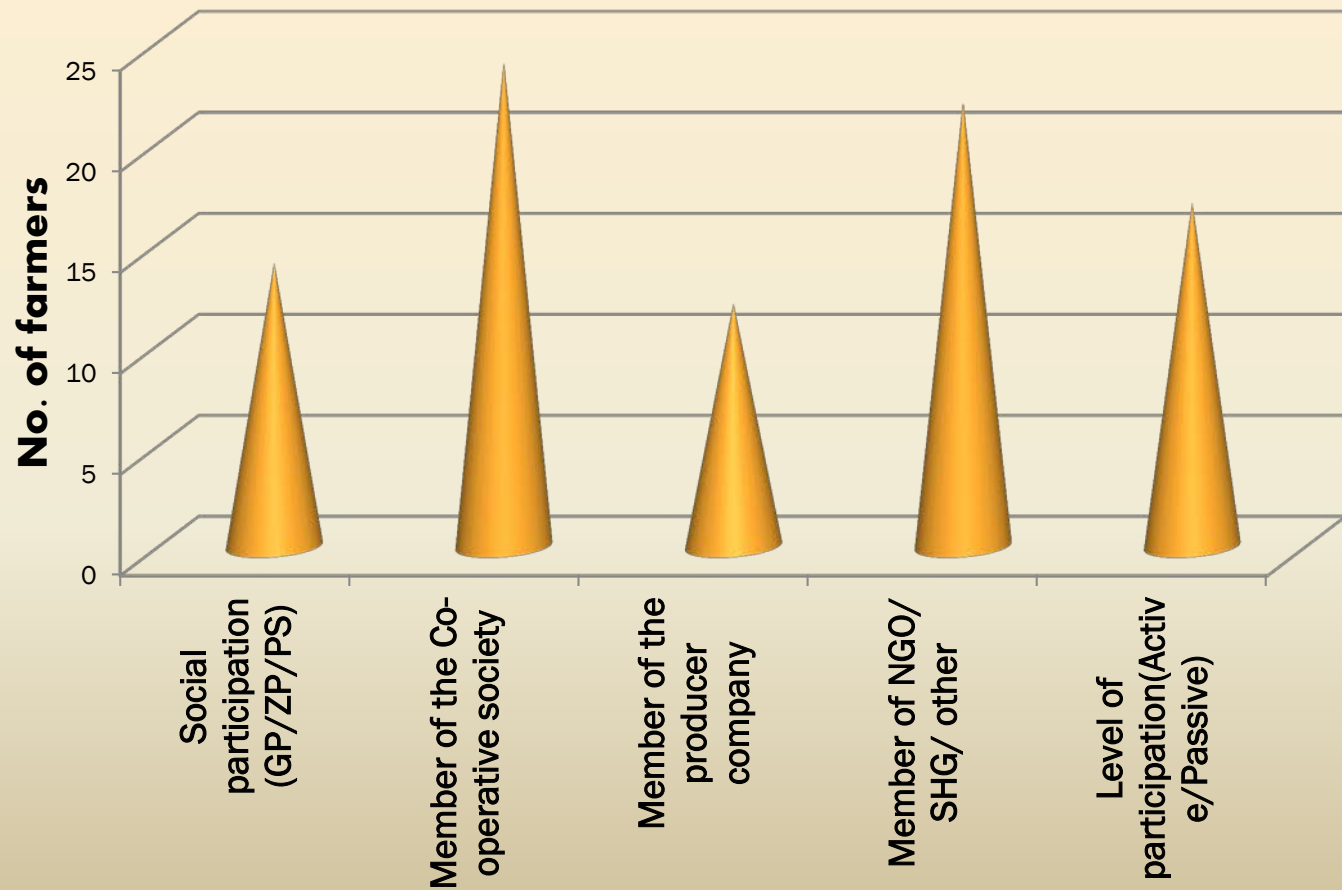


EXPERIENCE IN OF FARMING



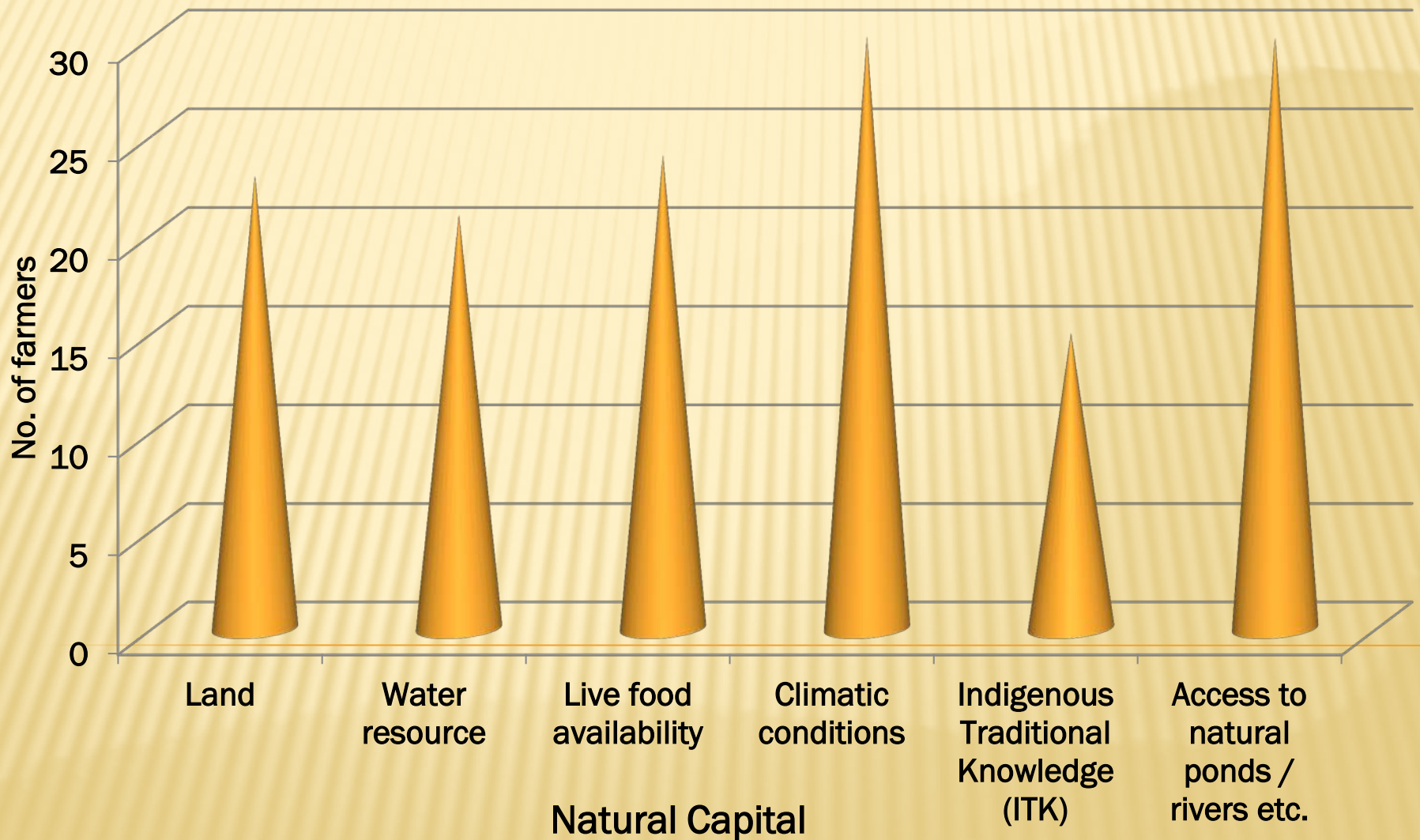
Social Participation:

Social Participation



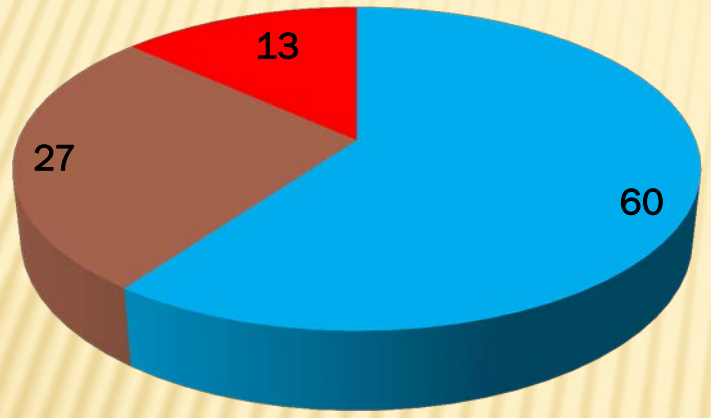
Economic status of the respondents

Natural Capital :



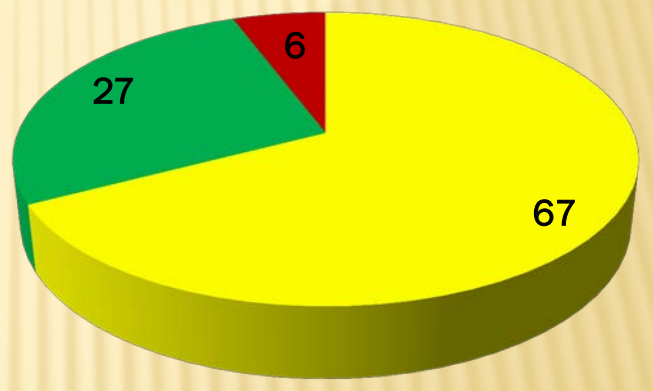
Farm Information:

Ownership



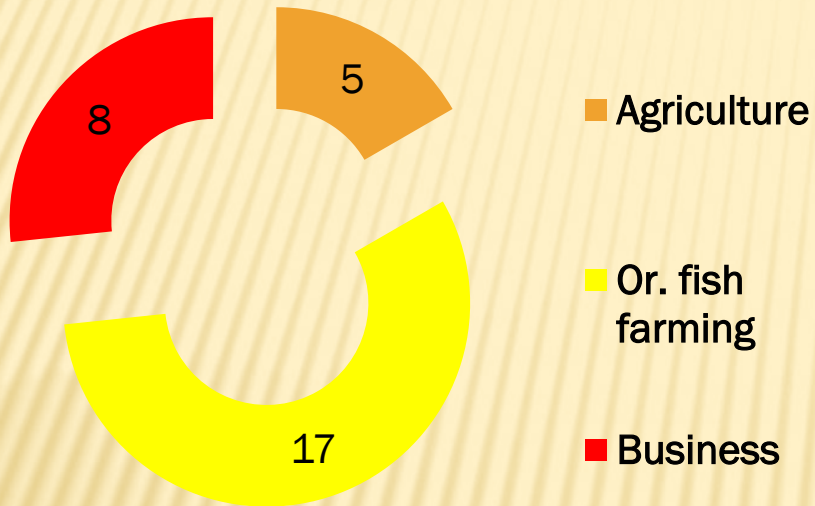
■ Owned ■ Leased ■ Both

Type of firm

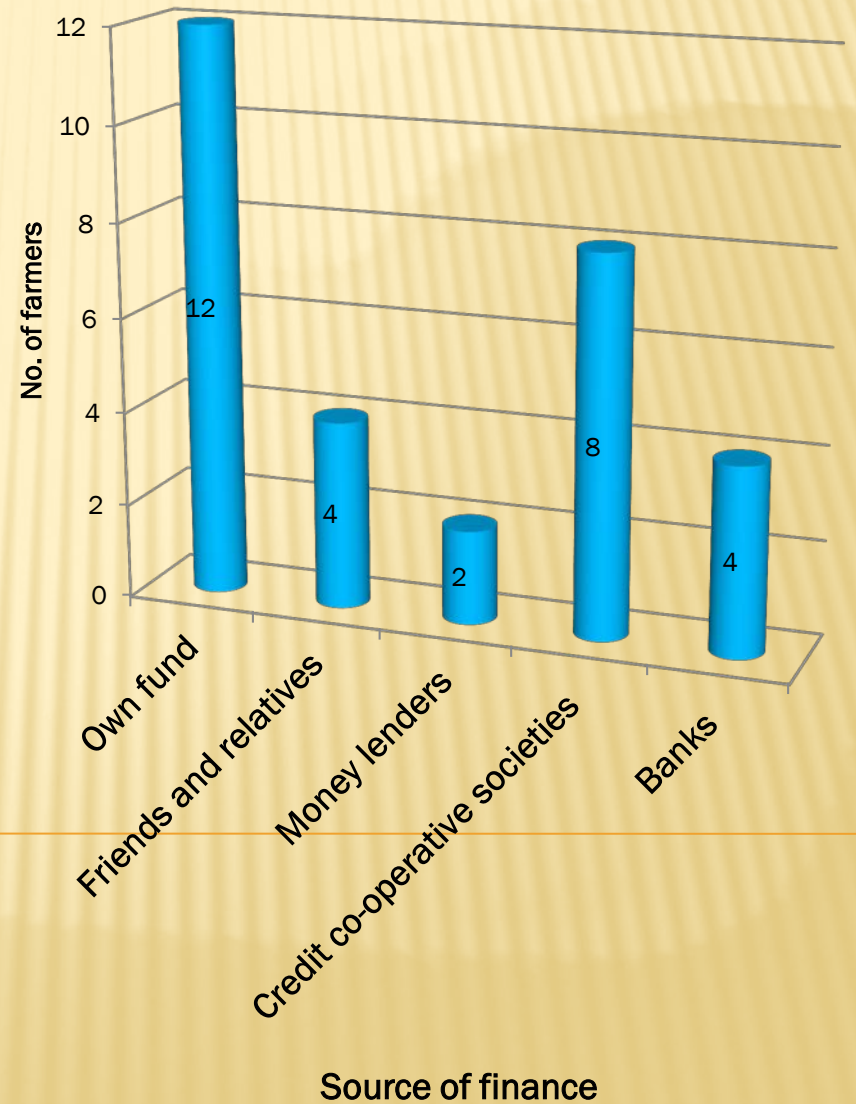


■ Sole trader ■ Partnership ■ PVT Ltd

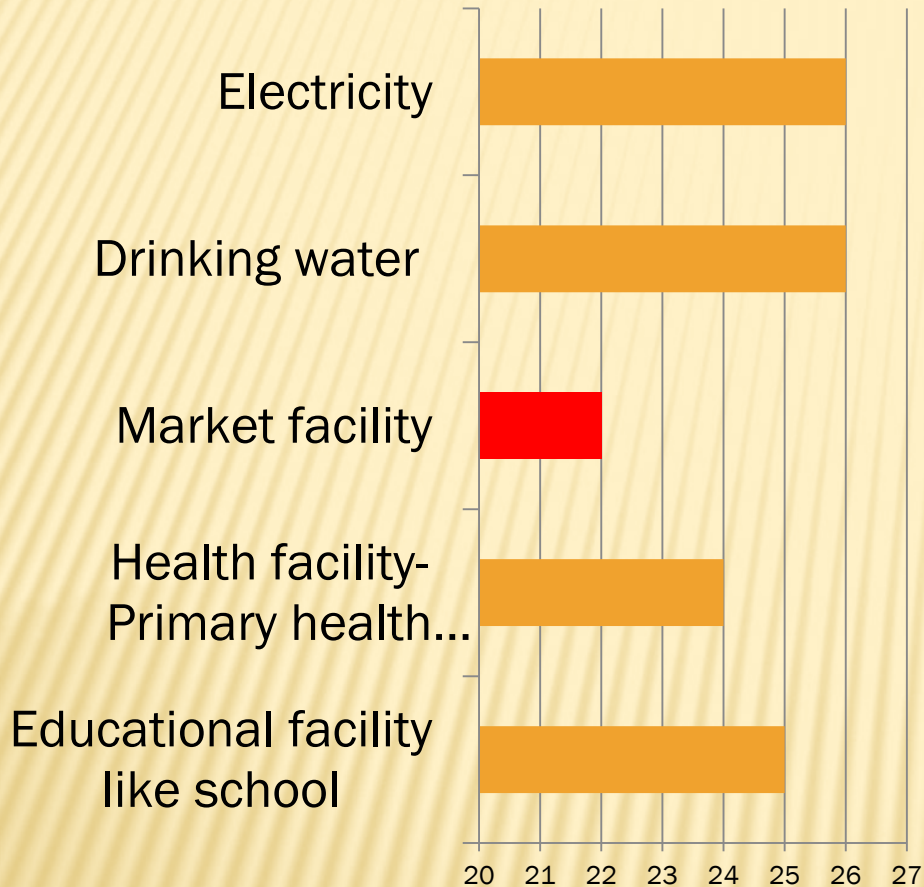
Primary occupation



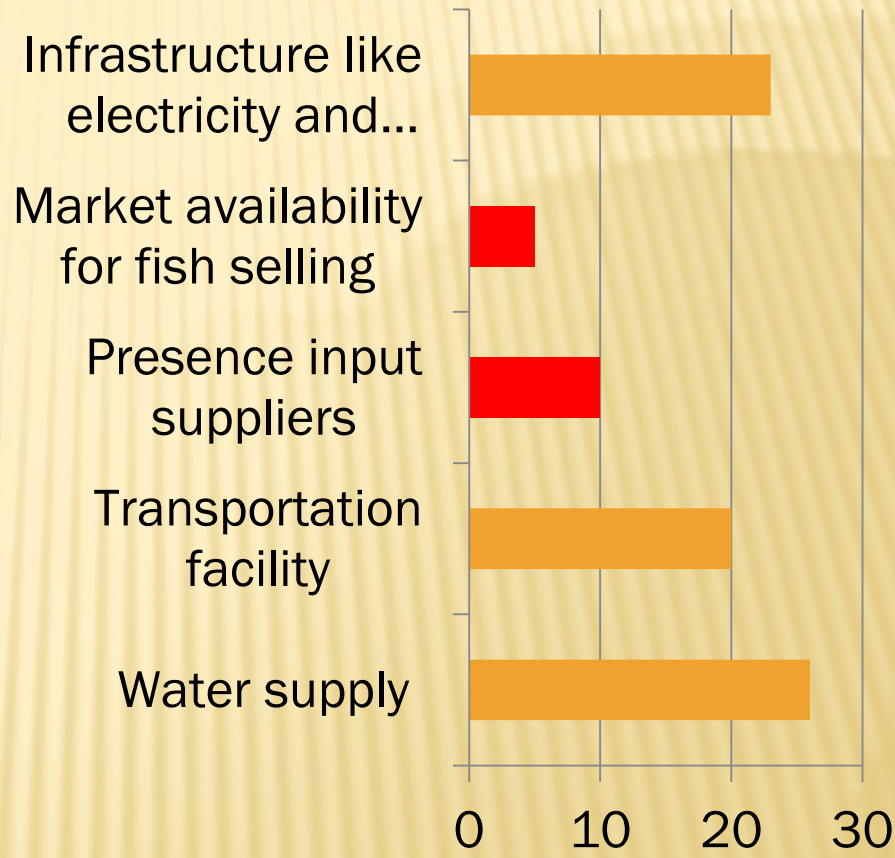
SOURCE OF FINANCE



Physical capital:



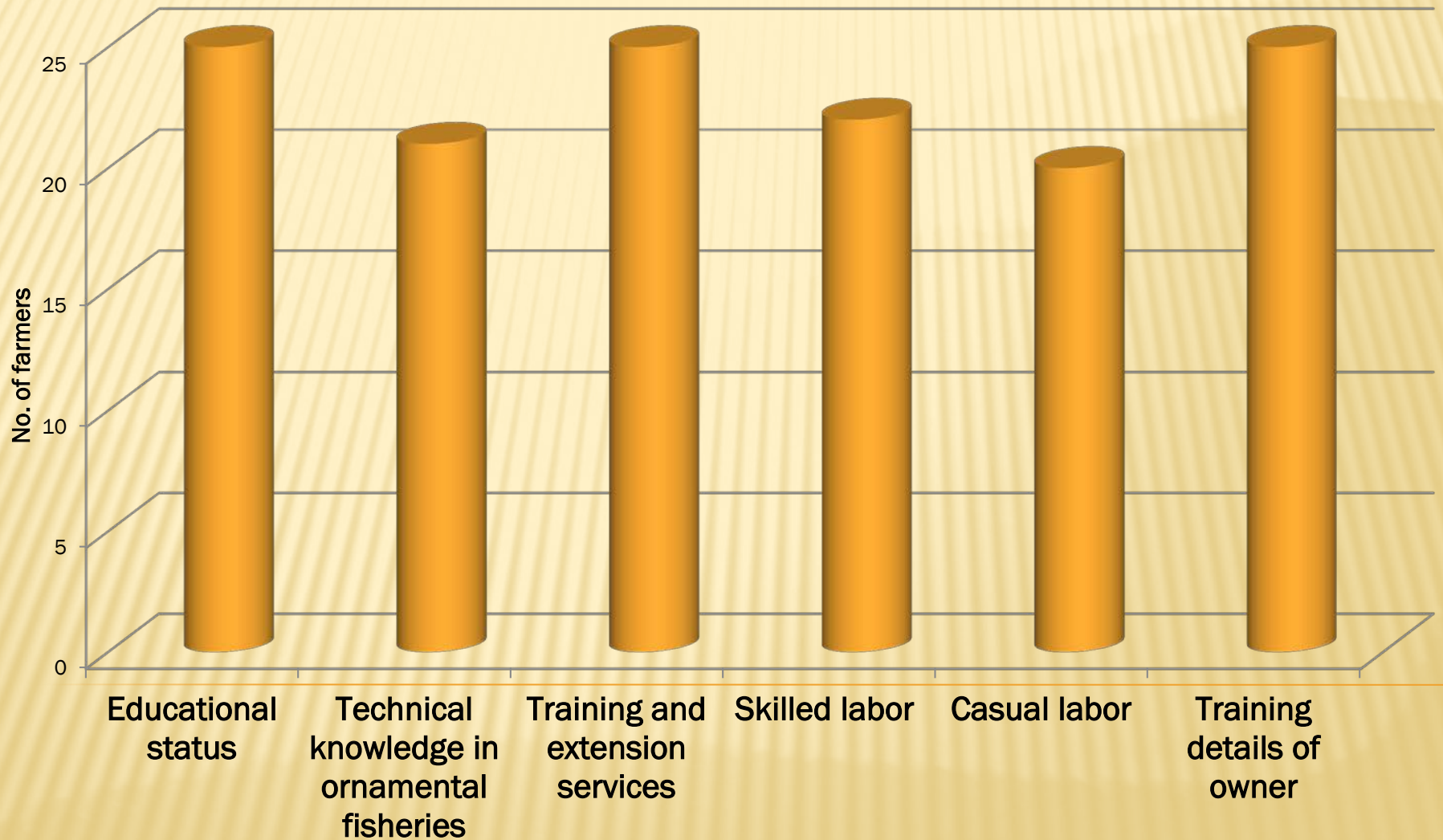
GENERAL



ORNAMENTAL FISHERIES RELATED

Human capital

HUMAN CAPITAL

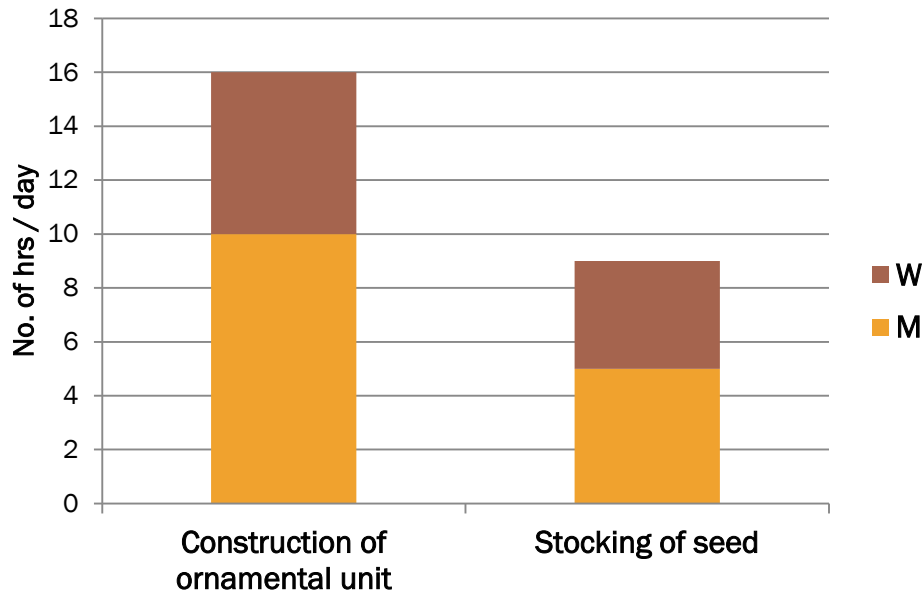
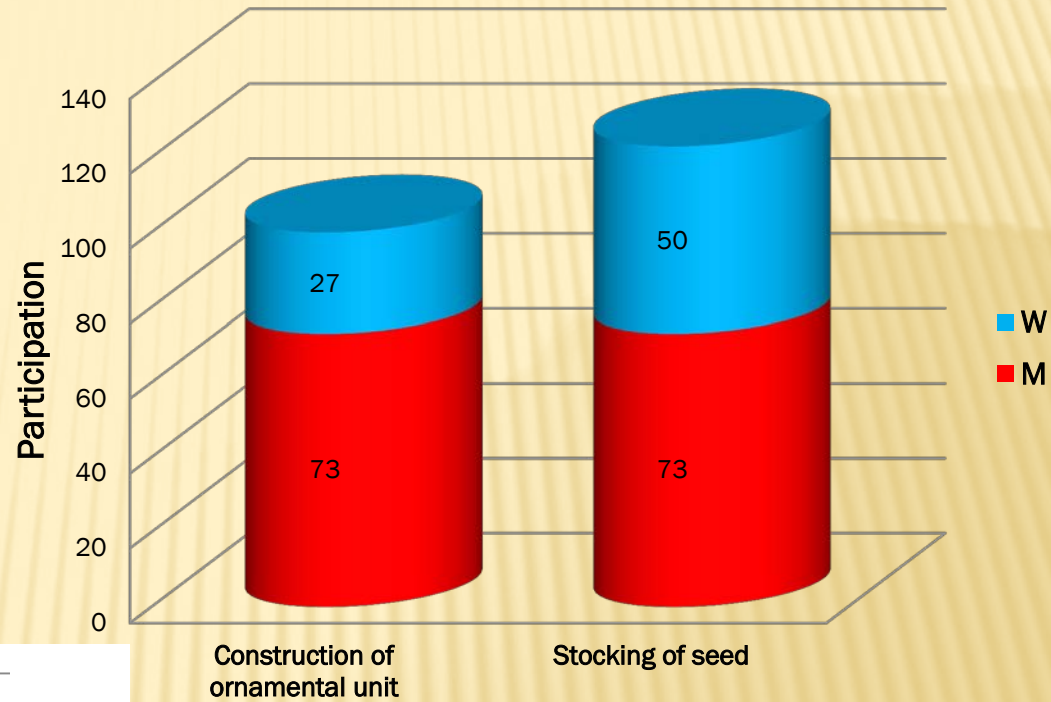


Source for information and training providers:

1. **Faculty of Fisheries (Dr. B.S. Konkan Agricultural University), Ratnagiri**
2. **Central Institute of Fisheries Education (ICAR-CIFE)**
3. **Krishi Vigyan Kendra (KVK)**
4. **Taraporewala Marine Biological Research Stations**
5. **Marine Biological Research Stations**
6. **Fisheries Units in Agri, Res. Stations**
7. **NGOs and others**

GENDER ROLE PROFILE

A) Activity profile: a) Single time activity



b) Daily Activities:

Sr. No.	Activity	Participation (Nos.)		Hours spend /d (%)	
		M	W	M	W
Daily Activities					
1	Feeding	26	24	87	80
2	Cleaning of tanks and siphoning	26	22	87	73
3	Observation of health check	30	10	100	33
4	Water parameter check	30	9	100	30
5	Feed preparation	20	23	67	77
6	Live feed culture and maintenance	28	5	93	17
7	Recording of parameters	30	5	100	17
8	Setting of fish for breeding	30	6	100	20
9	Removal of offspring's	25	15	83	50
10	Preparation of tanks for rearing or breeding	28	8	93	27

b) Daily Activities (Contd...):

Sr. No.	Activity	Participation (Nos)		Hours spend /d (%)	
		M	W	M	W
Daily Activities					
11	Recording of activity	28	9	93	30
12	Preparation for marketing	23	20	77	67
13	Packing of marketable fish	30	16	100	53
14	Marketing	30	3	100	10
15	Preparation and maintenance of filter system	30	5	100	17
16	Household work	14	30	47	100
17	Collecting firewood	5	26	17	87
18	Collecting water	6	30	20	100
19	Agriculture and dairy	23	25	77	83

B) Access and control of resources:

Particulars		Access		Control	
HOUSEHOLD RESOURCES		M	W	M	W
1	Land	High	Medium	High	Low
2	Farm				Low
3	Machines and equipments				Low
4	Agricultural resources				Medium
5	Other assets				Medium
FISHERY RELATED RESOURCES					
1	Ornamental fish unit	High	Medium	High	Medium
2	Breeding and rearing unit		Medium		Medium
3	Management of unit		Medium		Medium
4	Production		Medium		Low
5	Marketing		Low		Low
6	Income		Low		
FINANACIAL RESOURCES					
1	Income	High	Medium	High	Medium
2	Expenditure		Medium		Medium
3	Savings		Medium		Medium
4	Loan		Low		Low

Influencing factors :

- Community norms
- Social hierarchy
- Institutional structures were the possible influencing factors.

Needs of the Ornamental fish producers:

PRACTICAL BASIC NEEDS

- Education
- Health
- Income earning
- Shelter needs
- Transport
- Market facility
- Security

PRACTICAL FISHERY NEEDS

- Seed availability
- Feed availability
- Equipments
- Market facility
- Ornamental fish unit infrastructure
- Breeding and rearing unit infrastructure

Needs of the Ornamental fish producers:

STRATEGIC BASIC NEEDS

- Control of resources
- Access to credit
- House ownership
- Status in society
- Status in Household
- Leadership

STRATEGIC FISHERY NEEDS

- Lack of training
- Lack of expert advice
- Business expansion
- Market expansion
- Information of domestic and export market
- Meetings, Farmer-scientist meet

CONCLUSION:

- ✓ Right to take decision
 - ✓ Income, saving and expenditure
 - ✓ Fishery related decisions on production and marketing
 - ✓ Control over resources

- ✓ Need to develop Self Help Groups (SHG) in ornamental fisheries

- ✓ Gender specific training programmes in the specific field of Ornamental fisheries
 - ✓ Seed technology
 - ✓ Feed preparation
 - ✓ Live food preparation
 - ✓ Marketing of ornamental fish

- ✓ Market places of woman producers in metro cities



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Acknowledgements

1. **Gender in Aquaculture and Fisheries (GAF6) especially Dr. Meryl Williams and Dr. Nikita Gopal**
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