



**GENDER ROLES IN SECONDARY MARINE FISHERIES SECTOR OF MALPE,  
UDUPI DISTRICT, KARNATAKA, INDIA**

**Amrutha Prakash\* and Swathi Lekshmi P.S.  
FRAEED, ICAR-CMFRI, Vizhinjam Regional Centre,  
Trivandrum, India**

# INTRODUCTION

- Gender - qualitative and interdependent character of women's and men's position in society (FAO,2017).
- Globally in the post harvest sector, women accounts for just over 50% of full time employment and 71% of part time employment.
- About 36.9% employed throughout the small scale fisheries value chain &49.8% of the post-harvest workers were women.
- Secondary sector stakeholders- form major work force in marine fisheries sector; fisher folks are exclusively involved in fishery related activities in the pre or post harvest sector.



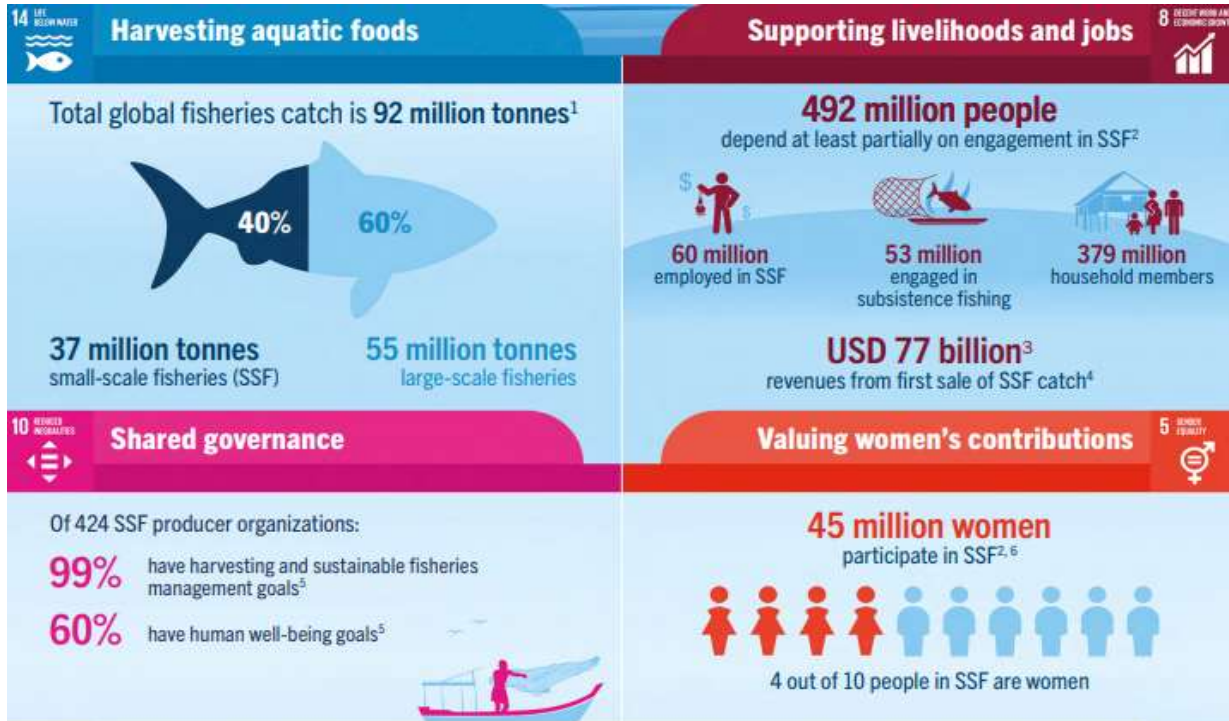
Sex disaggregated data on employment in fisheries sector by region,2020,FAO

State	Marketing of fish		Making/ Repairing Net		Curing/ Processing		Peeling		Labourer		Others*	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
West Bengal	2,148	2,146	2,702	15,354	534	1,252	402	1,060	3,670	3,114	149	89
Odisha	7,443	12,782	6,293	3,028	721	6,783	291	4,399	7,268	8,954	2,982	7,729
Andhra Pradesh	4,374	24,948	3,908	598	1,039	13,697	255	2,999	4,982	27,507	2,112	2,294
Tamil Nadu	2,337	33,498	5,164	4,018	880	5,903	432	3,636	10,345	6,174	2,221	2,700
Puducherry	69	3,375	310	22	20	230	19	46	1,847	481	275	126
Kerala	3,034	15,629	1,038	1,491	332	8,174	253	20,924	3,793	1,606	5,166	3,307
Karnataka	1,506	12,702	388	96	126	204	159	1,911	4,550	1,496	1,117	537
Goa	105	1,530	189	17	5	0	1	1	168	17	288	422
Maharashtra	2,950	53,603	3,659	1,372	192	6,010	225	3,338	7,689	3,291	4,201	8,322
Gujarat	3,703	19,475	1,894	2,340	621	870	424	4,627	9,371	9,698	1,215	661
Daman & Diu	3	506	4	3	4	0	0	0	80	32	0	0
Lakshadweep	306	432	245	65	179	495	19	684	104	24	0	0
Andaman & Nicobar	573	1,060	341	124	16	5	34	18	104	118	0	0
<b>Total</b>	<b>28,551</b>	<b>1,81,686</b>	<b>26,135</b>	<b>28,528</b>	<b>4,669</b>	<b>43,623</b>	<b>2,514</b>	<b>43,643</b>	<b>53,971</b>	<b>62,512</b>	<b>19,726</b>	<b>26,187</b>

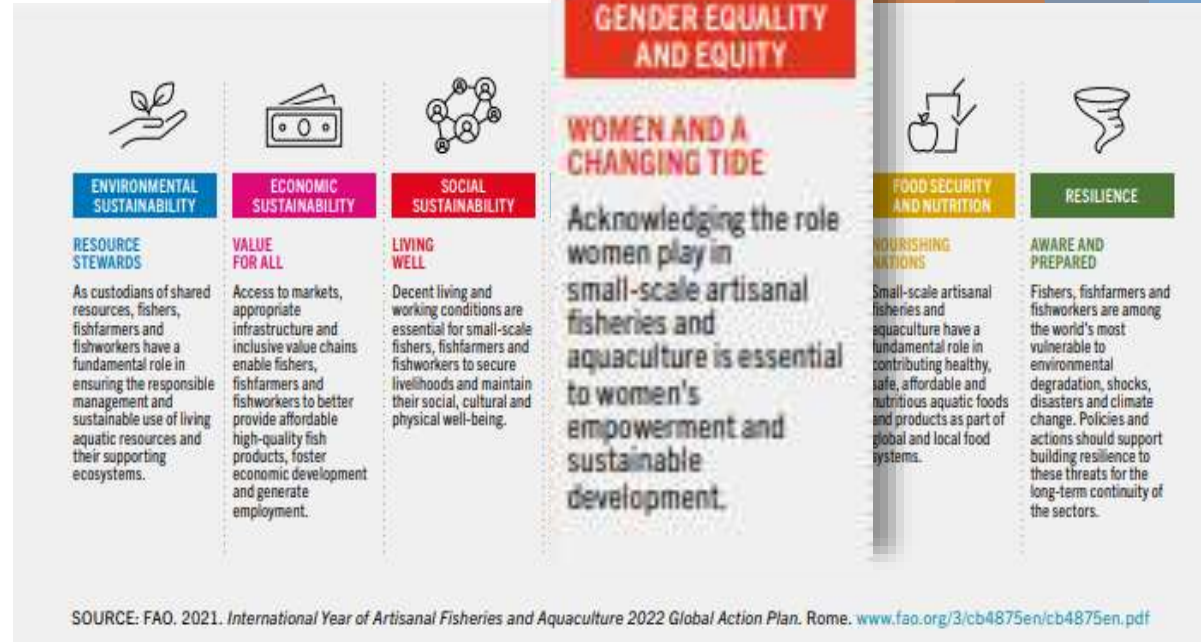
\*Includes persons engaged in auctioning, ice breaking, collection of bivalves, collection of other shells, collection of seaweed, collection of ornamental fish etc.

- Secondary sector involves all gamut of activities once the fish has landed.
- Major workforce → women workers in operations such as sorting, loading, unloading, fish vending and also men involved in activities such as fish vehicle driving, wholesalers, retailers, gear makers etc.
- About 94% of all those engaged in capture fisheries operate in small scale fisheries, including an estimated 45 million women.
- Current obstacle → lack of gender disaggregated data on all aspects of women's role and participation in fisheries sector.





## Contribution of small-scale fisheries (SSF) to sustainable development







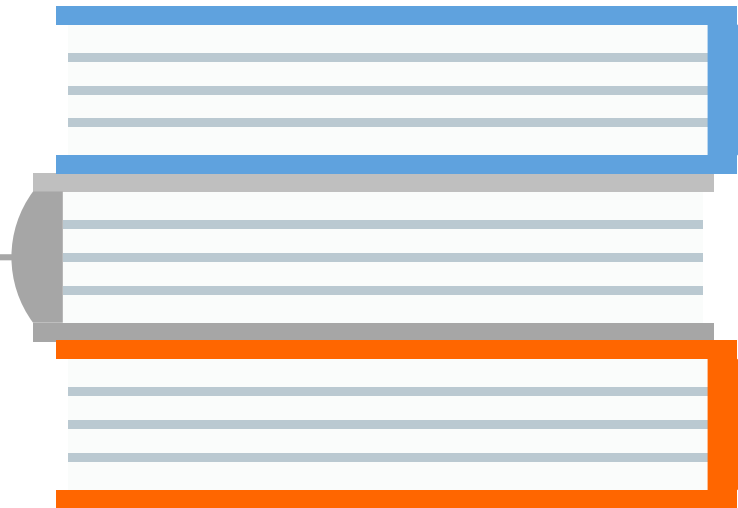




# RESEARCH OBJECTIVES

## GENDER ROLES

To document the roles performed by both men and women in the secondary sector



## PROFILE

To study the profile characteristics of both men and women engaged in post harvest operations

## VARIABLES

To investigate the significance of association between gender with respect to dependent and independent variables

# METHODOLOGY

Locale of research-  
Malpe harbor of  
Udupi district,  
Karnataka, India

Sampling method-  
Random sampling

Sample size-Total 60 ;  
31 women and 29  
men engaged  
exclusively in  
secondary sector

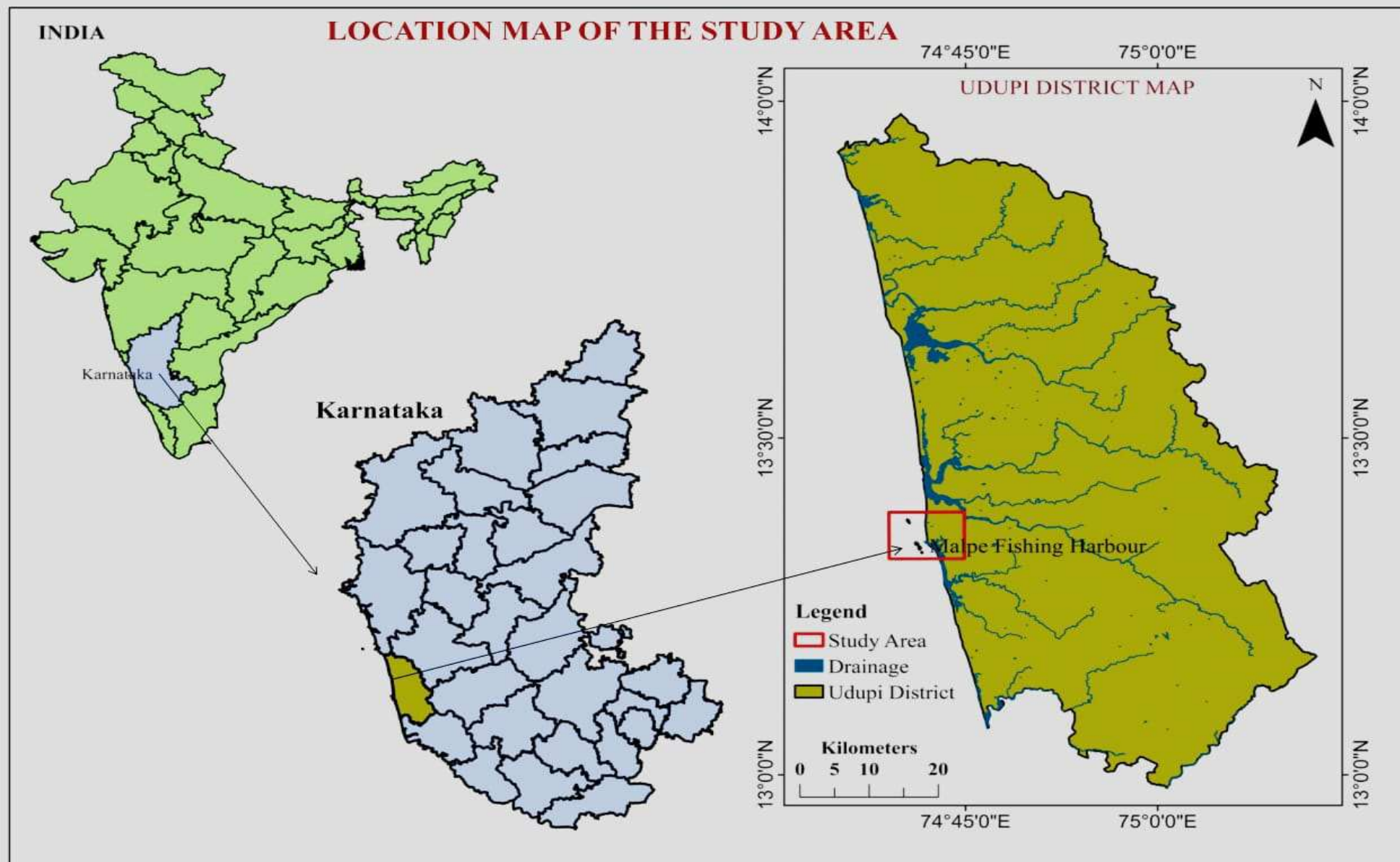
Methods of data  
collection- Personal  
interviews and Focus  
Group Discussions

Methods of  
data analysis-  
Using SPSS.  
Chi square  
test was used





# LOCALE OF THE STUDY- Malpe Fishing harbor, Udupi district, Karnataka

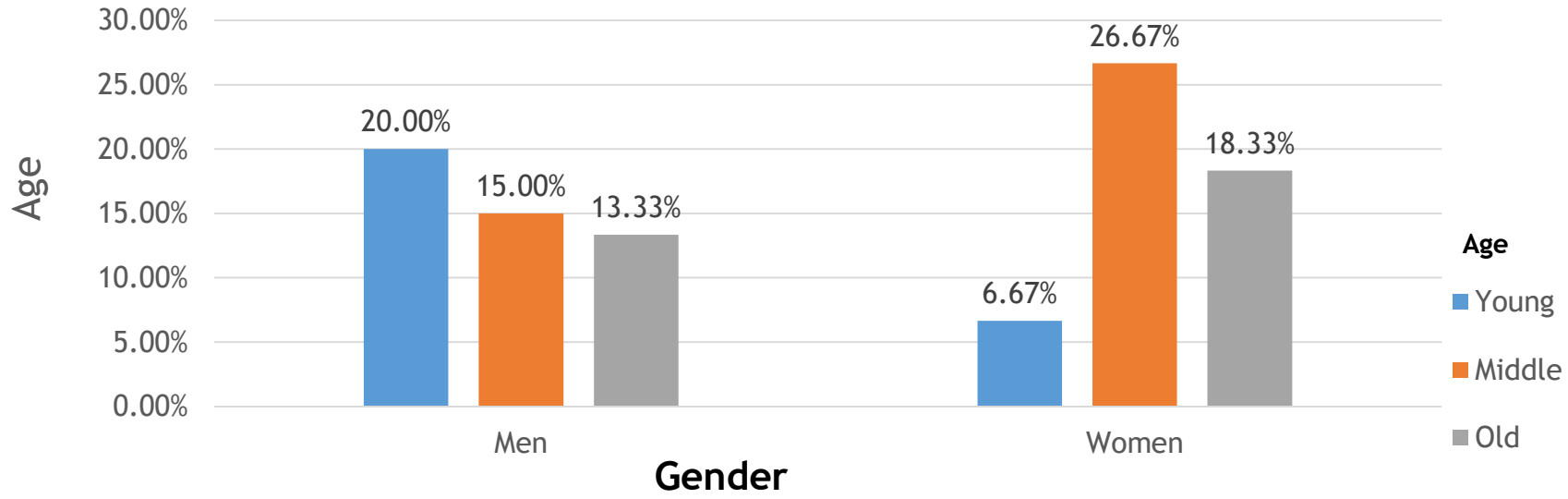


# RESULTS

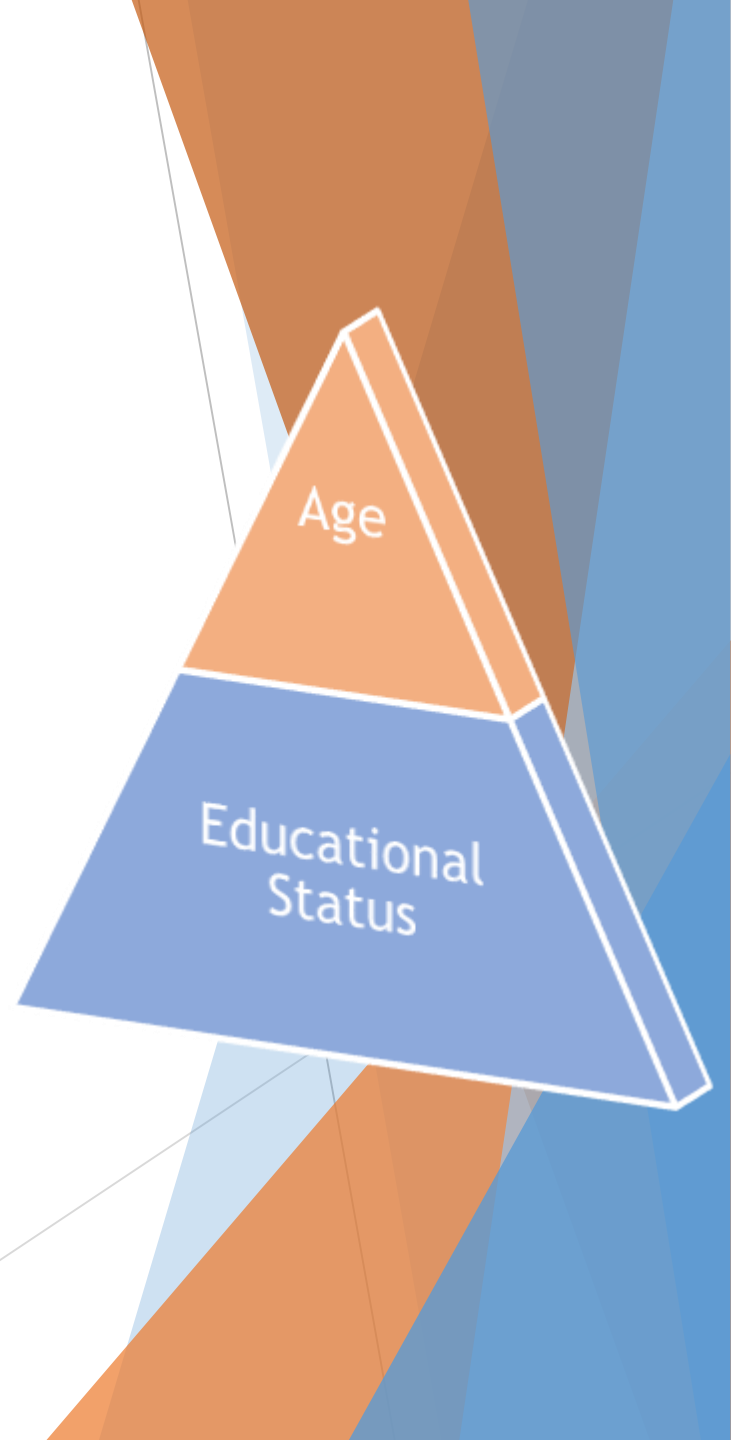
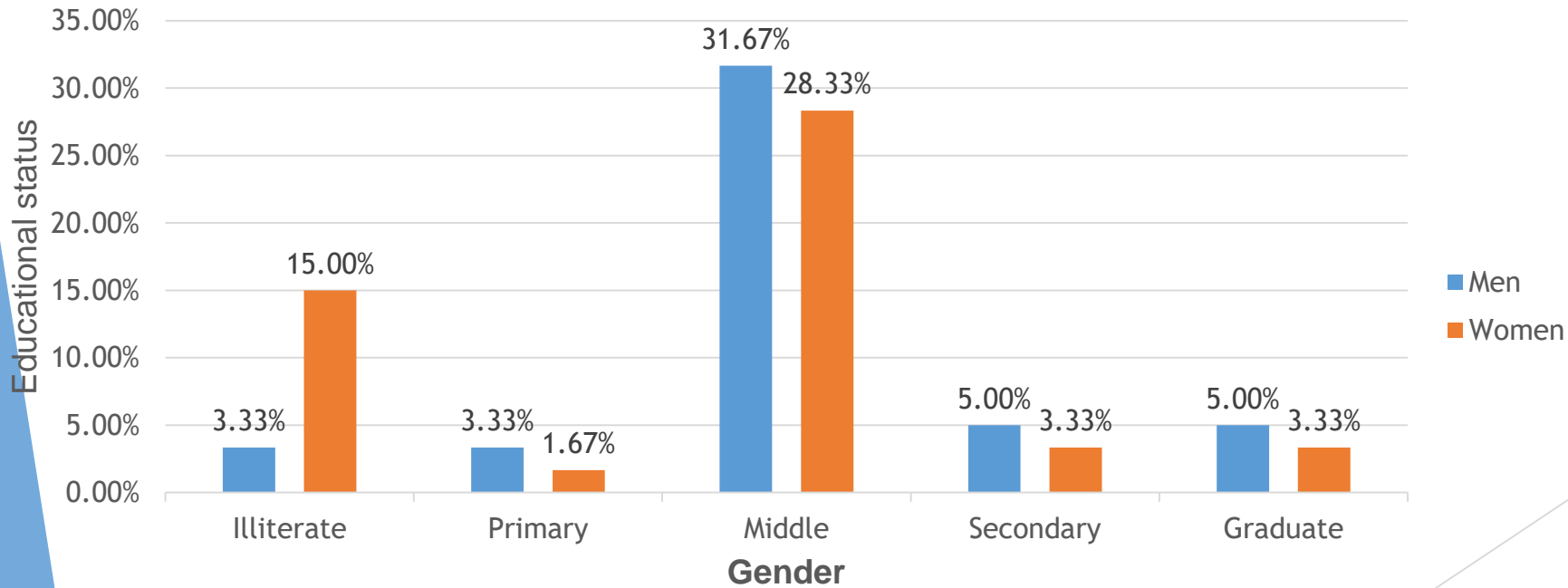
RESULTS



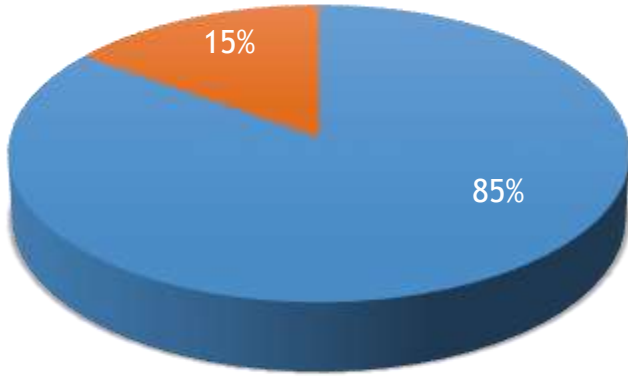
### Age



### Educational status



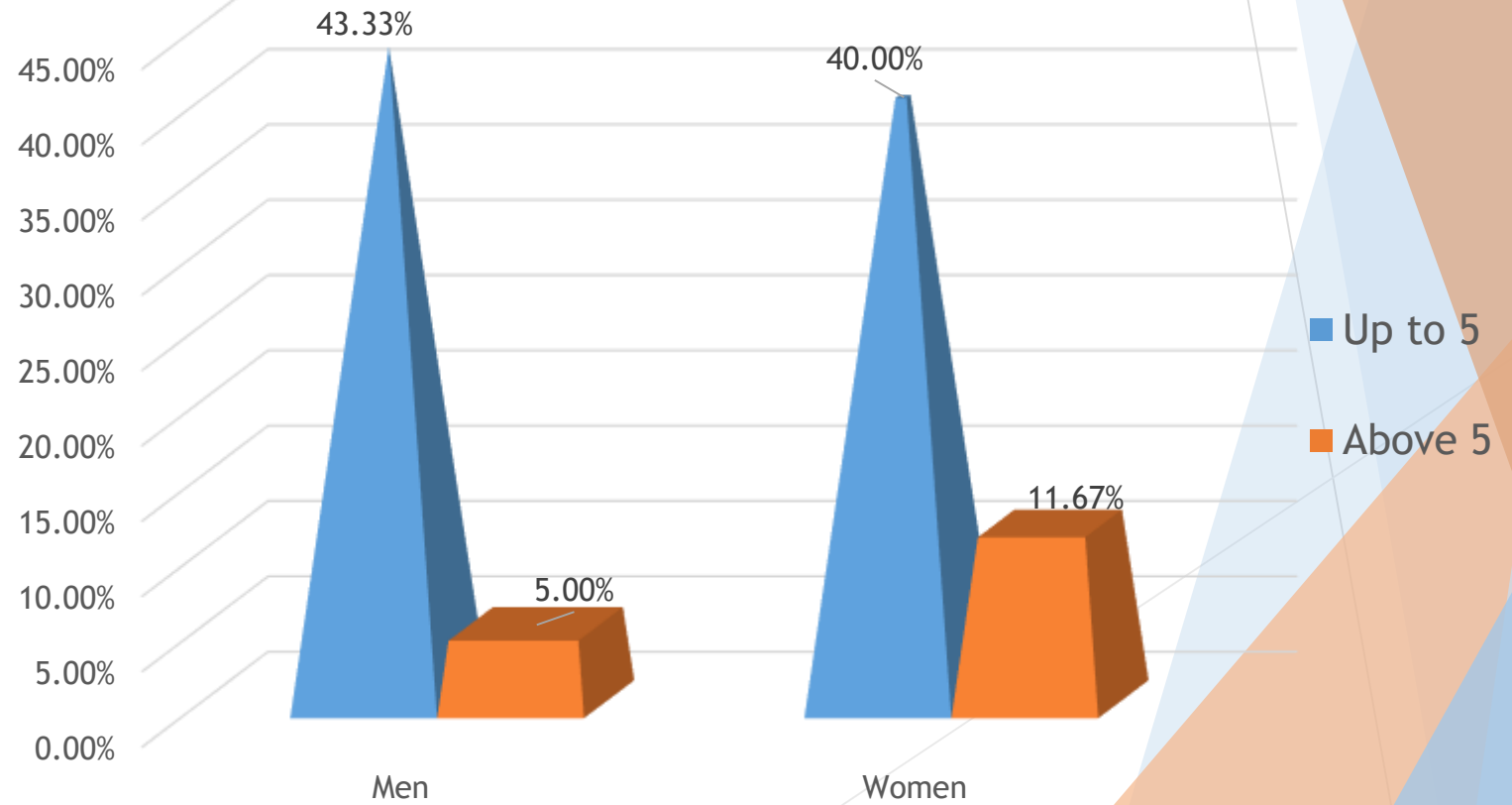
# Total



■ Nuclear ■ Joint

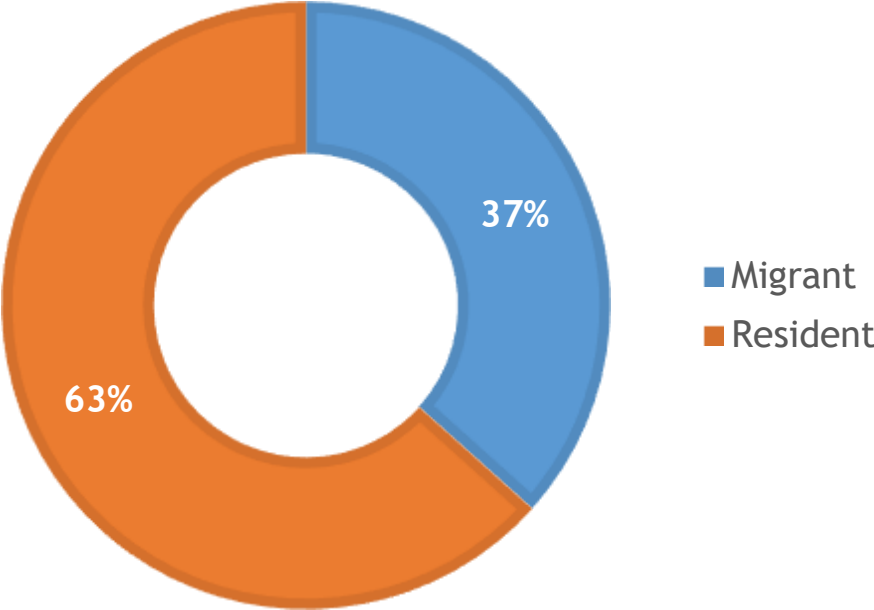
## FAMILY TYPE

## FAMILY SIZE

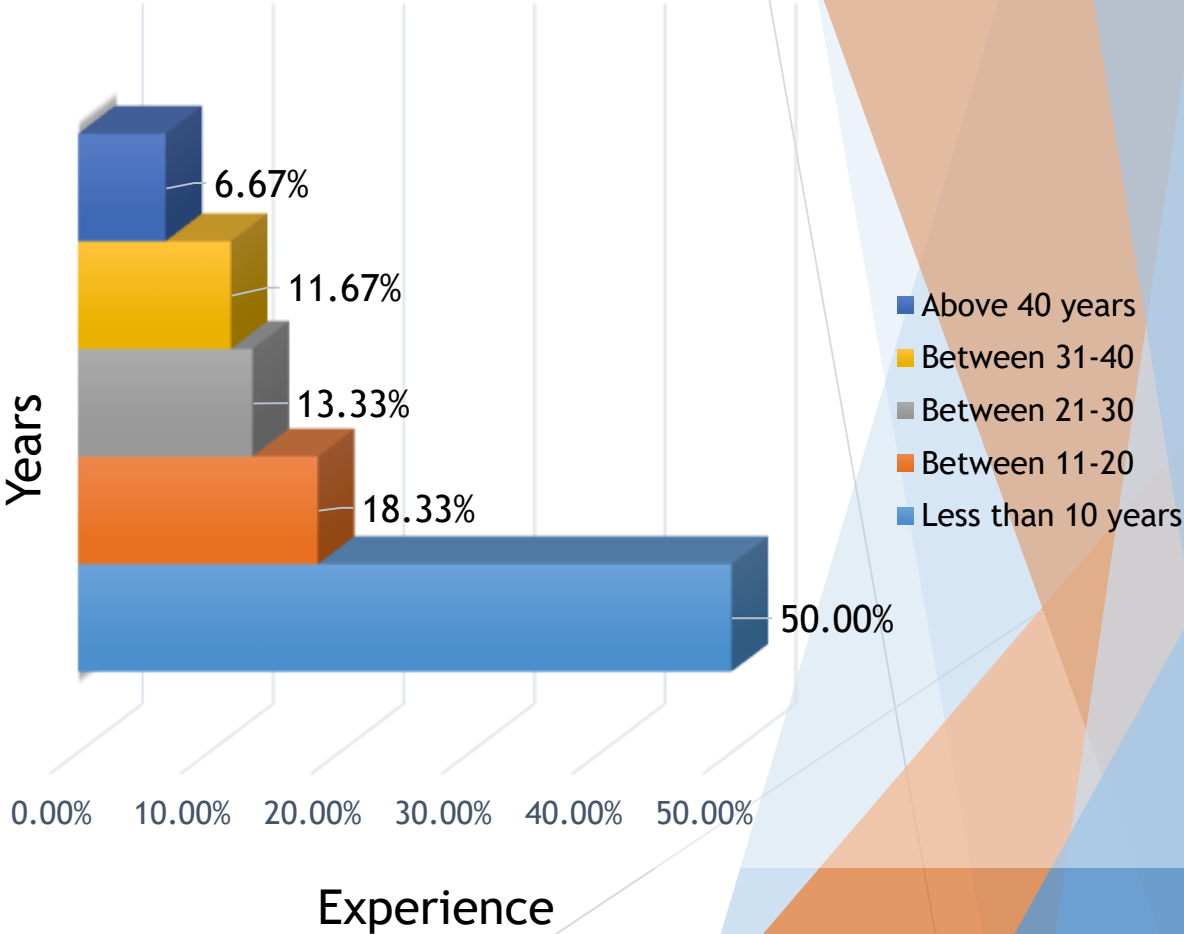




# NATIVITY

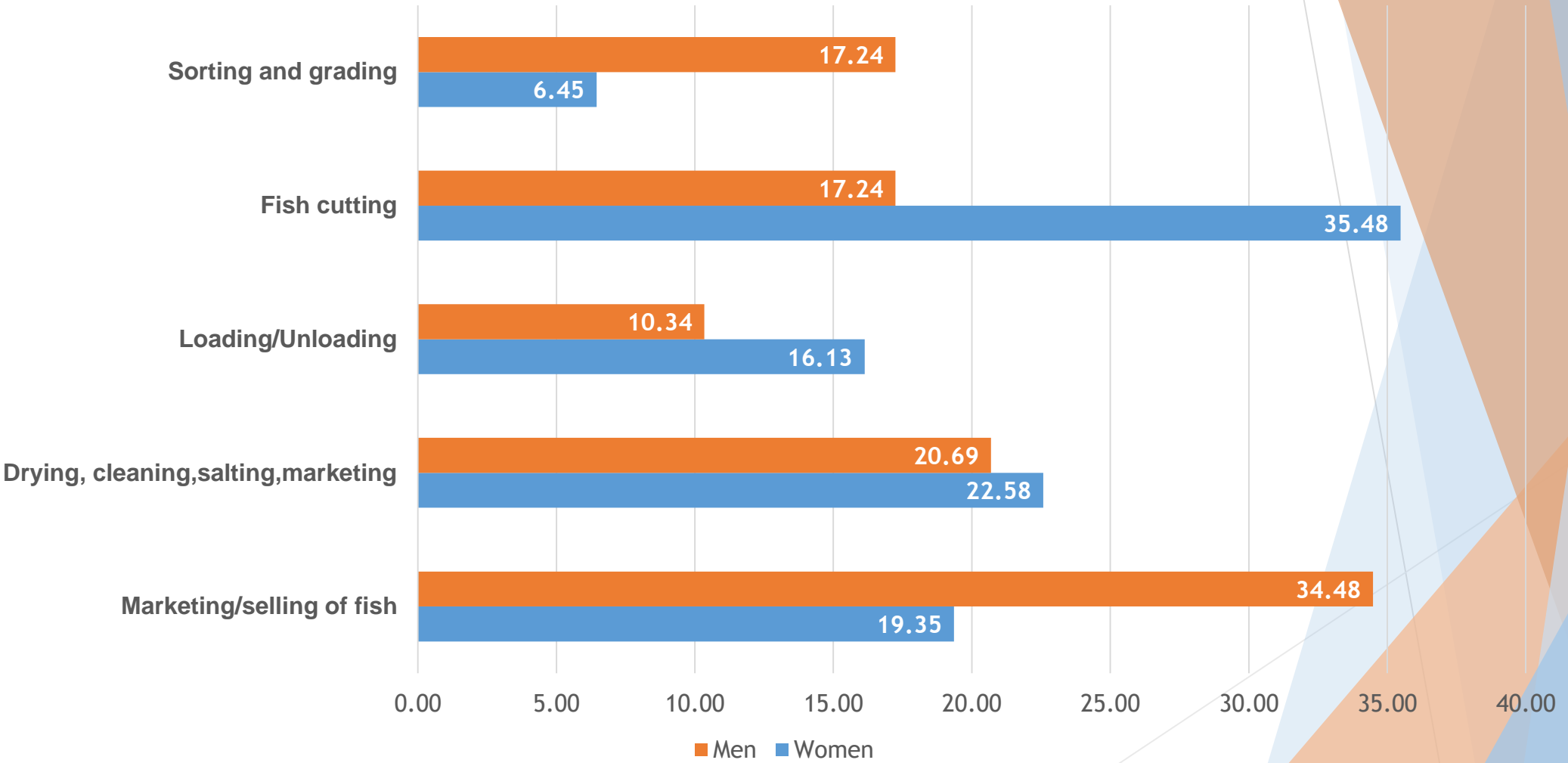


# TOTAL EXPERIENCE



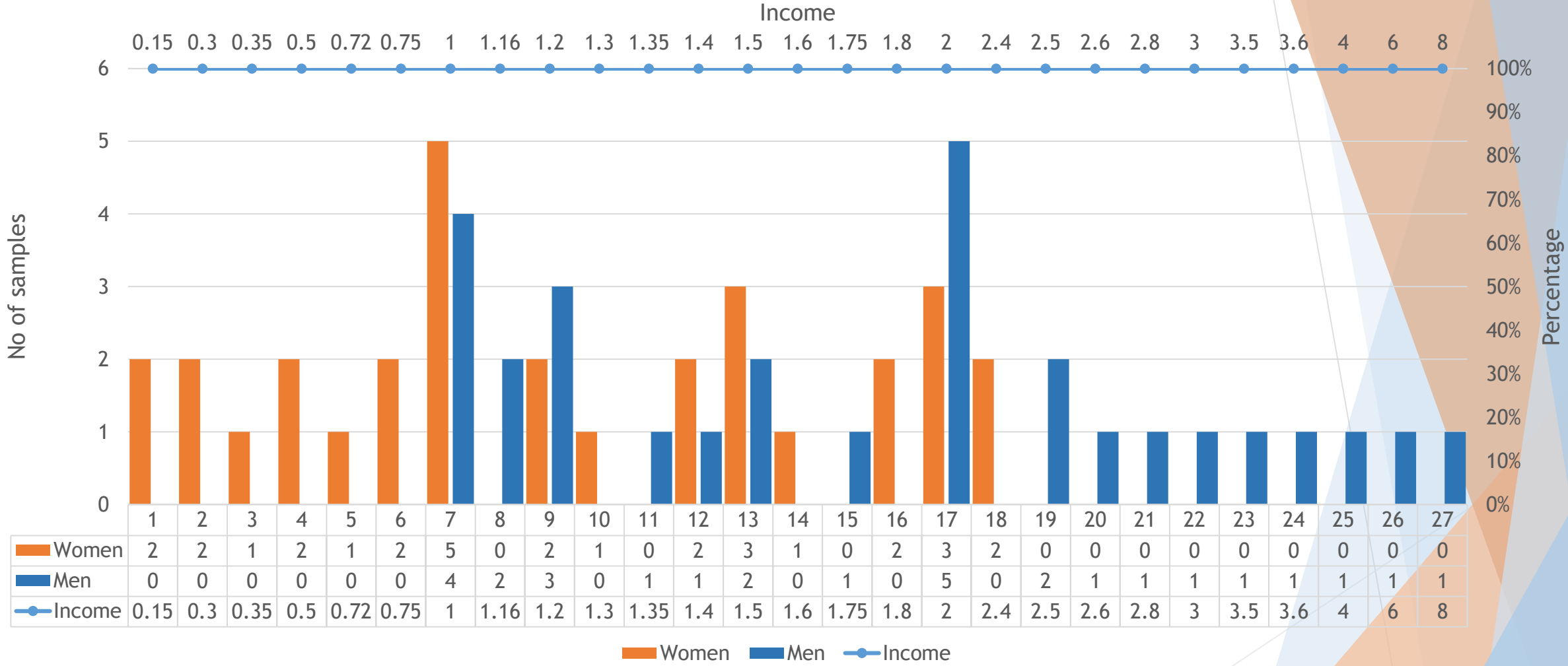
# Occupation

Activities performed





# ANNUAL INCOME

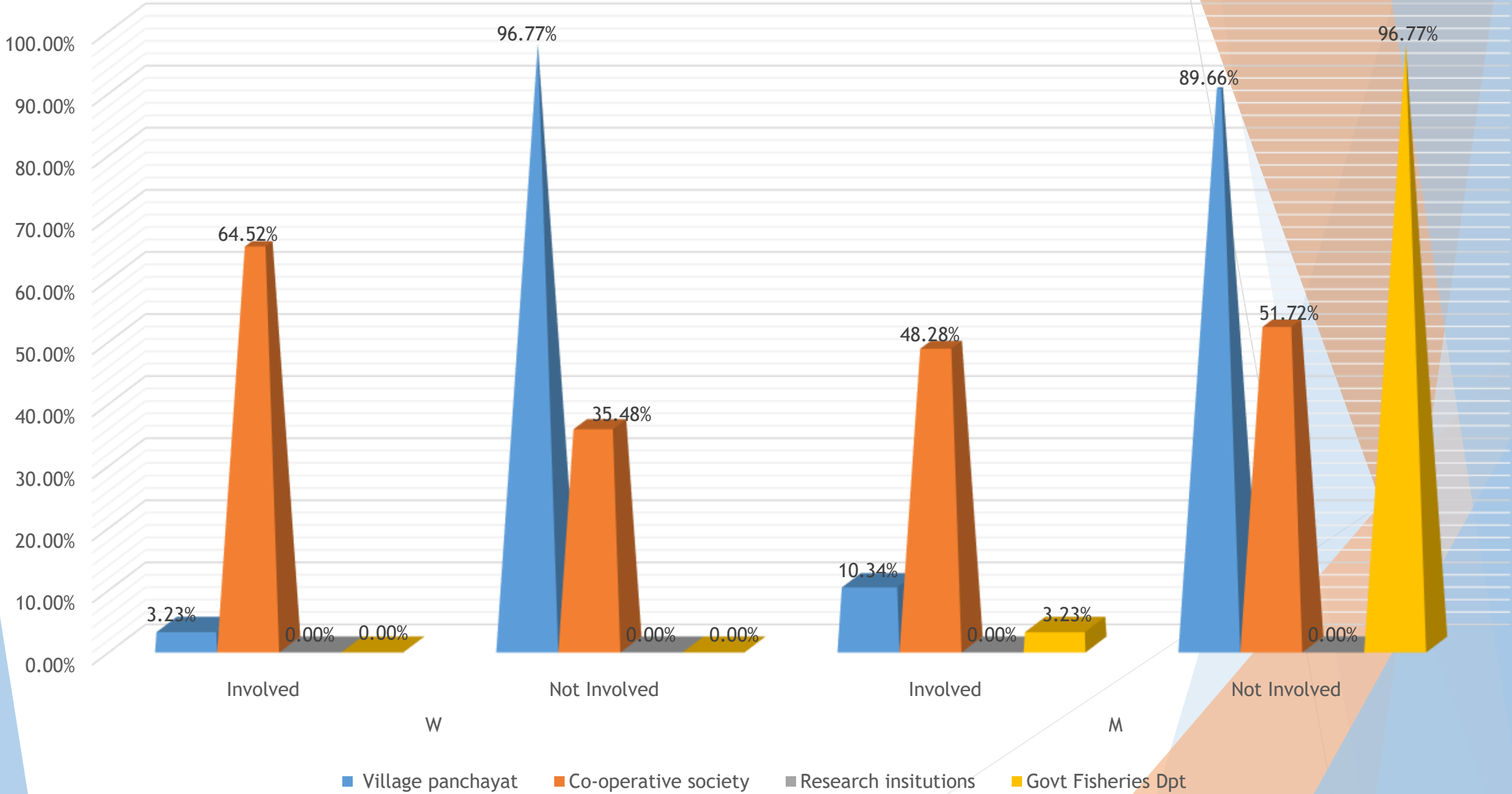


Average Annual income- 1.7 lakhs INR ( 2080 USD)

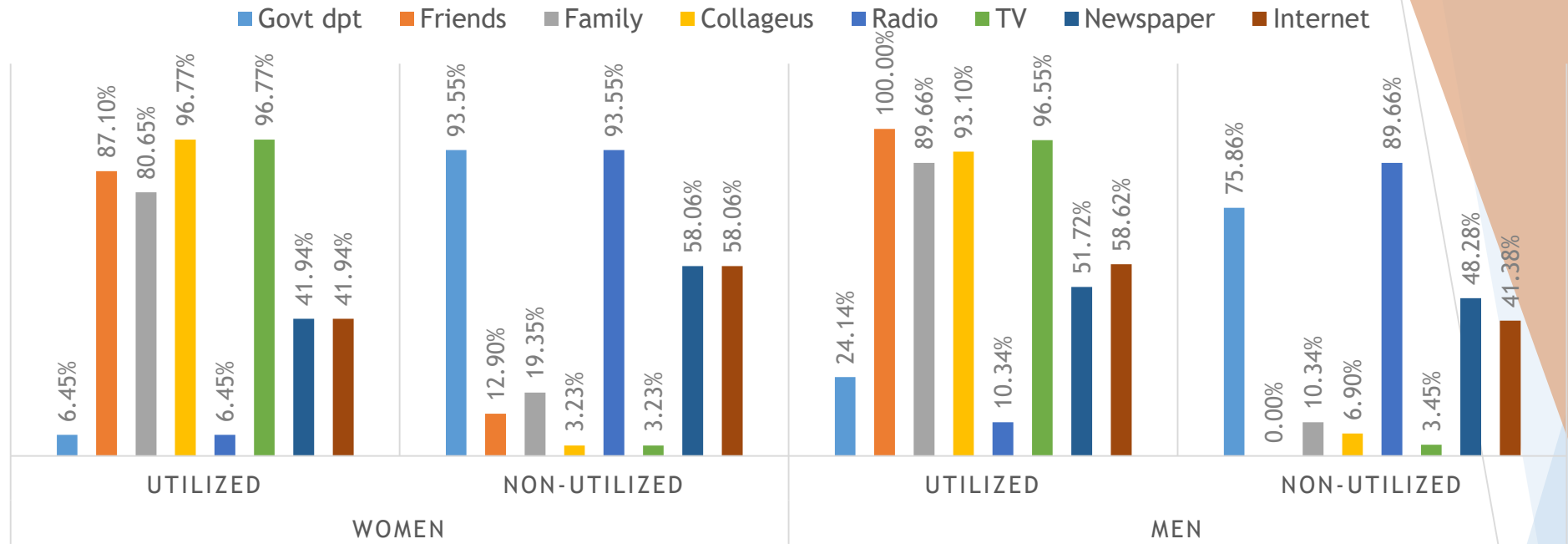
	Chi-Square value	p value
<b>Age</b>	6.37	0.041*
<b>Family type</b>	0.95	0.329
<b>Educational status</b>	5.24	0.264
<b>Family size</b>	1.62	0.204
<b>Marital status</b>	5.83	0.016*
<b>Migrant/Resident</b>	8.28	0.004*
<b>Experience</b>	5.93	0.204
<b>Total Annual income (in lakhs)</b>	15.15	0.002*



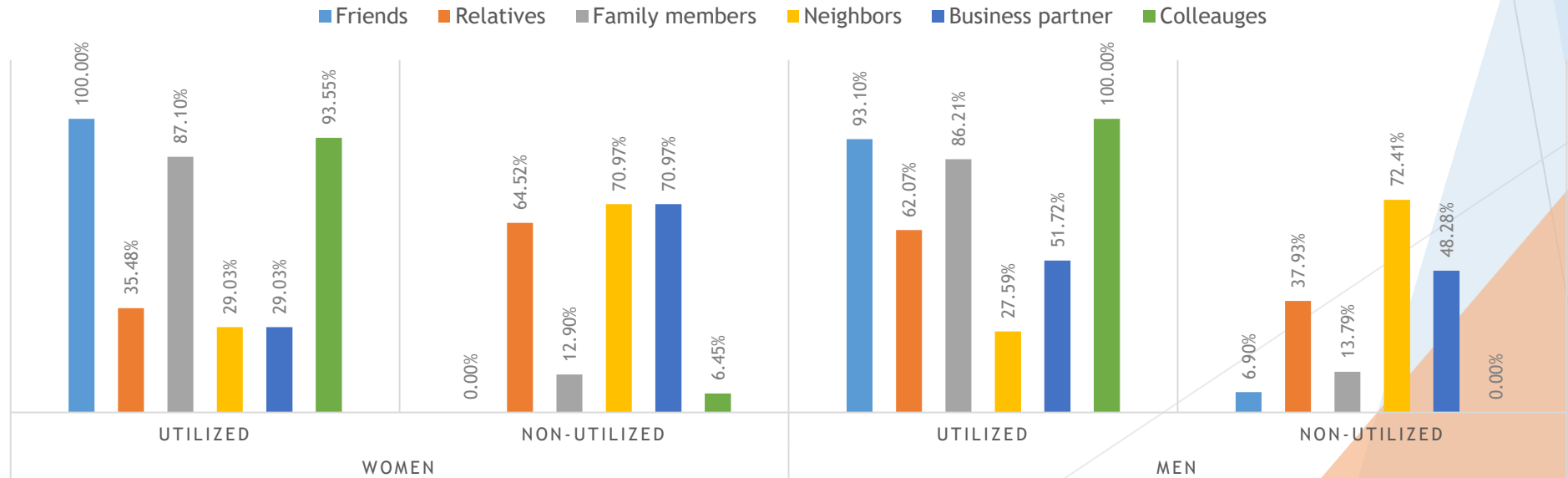
# Social participation



## INFORMATION SEEKING BEHAVIOR



## INFORMATION SHARING BEHAVIOUR



## Information seeking behavior

	Chi square value	p value
Academic instruction	10.18	0.017*
Govt depts	2.23	0.328
Associations	3.70	0.157
friends	8.40	0.038*
family	4.69	0.196
collaegues	3.59	0.31
Radio	3.80	0.284
TV	5.10	0.078
Newspaper	3.72	0.293
Internet	12.07	0.007*

## Information sharing behavior

	Chi square value	p value
Friends	4.98	0.173
relatives	6.74	0.081
family members	12.99	0.005*
neighbors	8.80	0.032*
business partner	14.97	0.002*
colleagues	6.55	0.088



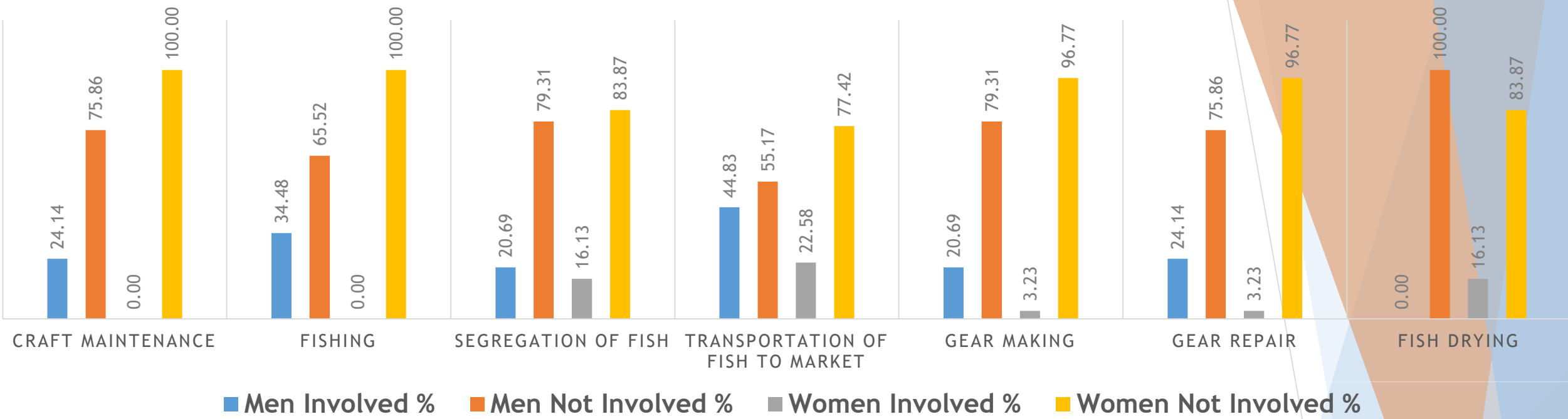
## DECISION MAKING

Decisions	Gender	Never	With family	With spouse	Alone
Where/when/how to work	F	3.23%	9.68%	32.26%	54.84%
	M	0.00%	10.34%	10.34%	79.31%
Purchase of critical work inputs	F	9.68%	6.45%	45.16%	38.71%
	M	0.00%	20.69%	17.24%	62.07%
Availing credit/subsidies	F	0.00%	16.13%	67.74%	16.13%
	M	0.00%	24.14%	27.59%	48.28%
Utilisation of earned money	F	12.90%	6.45%	54.84%	25.81%
	M	0.00%	13.79%	27.59%	58.62%

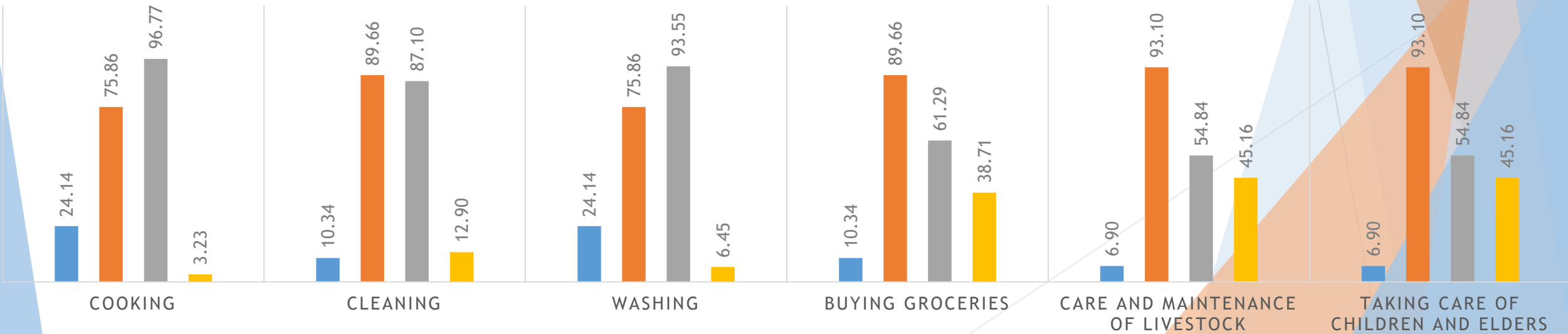
## DECISION MAKING

Decisions	Chi square value	p value
Take decisions on what, when, where and how to work	27.49	0*
Take decisions on purchase of critical work inputs	5.61	0.132
Take decisions on availing credit facilities or subsidies	10.41	0.015*
Make decisions on how to spend money earned from post-harvest works	3.49	0.322

## PRODUCTIVE ROLES



## REPRODUCTIVE ROLES

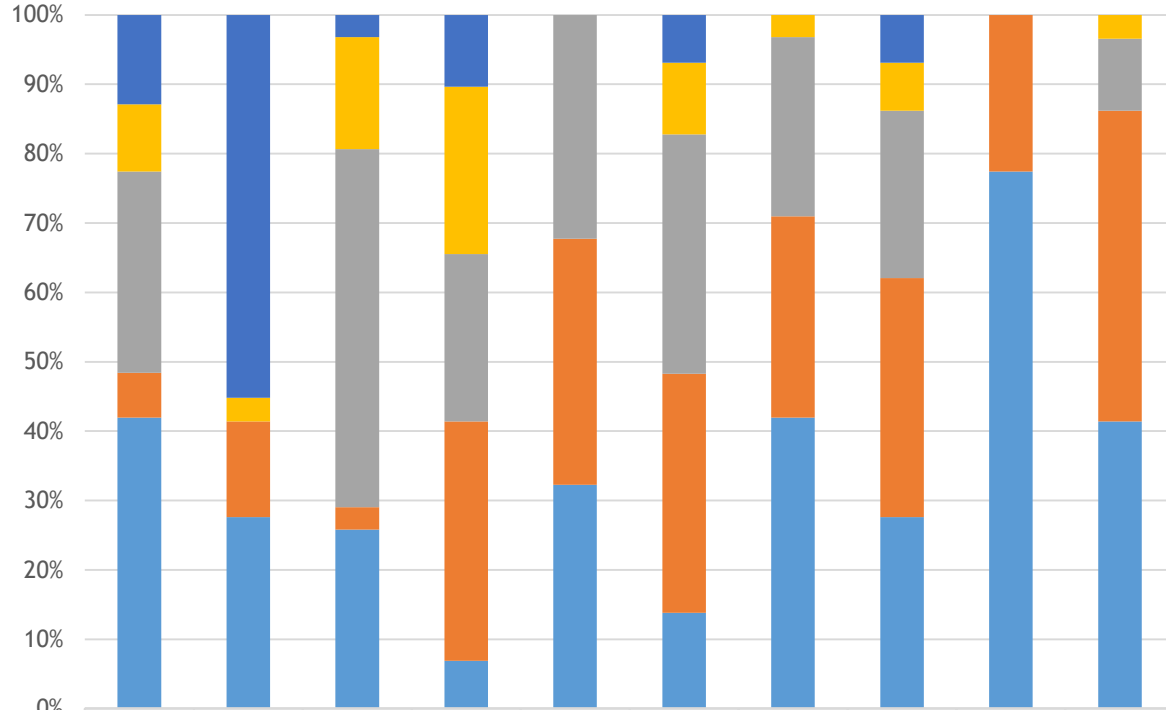




		Chi square value	p value
<b>Reproductive roles</b>	Cooking	38.74	0.000*
	Washing	31.94	0.000*
	Cleaning	28.28	0.000*
	Buying groceries	0.98	0.611
	Care and maintenance of livestock	10.36	0.006*
	Taking care of elders and children	24.24	0.000*

		Chi square value	p value
<b>Productive roles</b>	Craft maintenance	8.47	0.014*
	Segregation of fish	3.12	0.210
	Transportation of fish to market	2.24	0.326
	Marketing of fish	3.08	0.215
	Gear making	7.87	0.020*
	Gear repair	6.17	0.046*
	Fish drying	5.10	0.024*

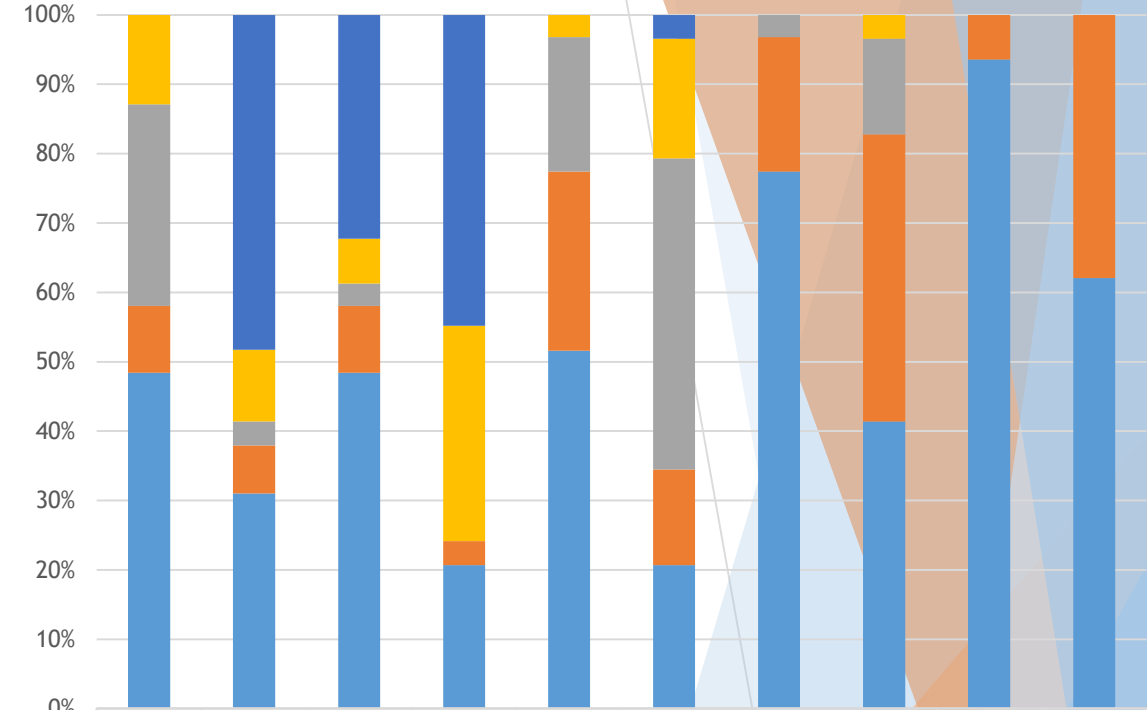
### Access over resources



	W	M	W	M	W	M	W	M	W	M
	Land		Labor		Capital		Mass media		Technology	
■ Full	12.90%	55.17%	3.23%	10.34%	0.00%	6.90%	0.00%	6.90%	0.00%	0.00%
■ More	9.68%	3.45%	16.13%	24.14%	0.00%	10.34%	3.23%	6.90%	0.00%	3.45%
■ Medium	29.03%	0.00%	51.61%	24.14%	32.26%	34.48%	25.81%	24.14%	0.00%	10.34%
■ Less	6.45%	13.79%	3.23%	34.48%	35.48%	34.48%	29.03%	34.48%	22.58%	44.83%
■ No	41.94%	27.59%	25.81%	6.90%	32.26%	13.79%	41.94%	27.59%	77.42%	41.38%

■ No ■ Less ■ Medium ■ More ■ Full

### Control over resources



	W	M	W	M	W	M	W	M	W	M
	Land		Labor		Capital		Mass media		Technology	
■ Full	0.00%	48.28%	32.26%	44.83%	0.00%	3.45%	0.00%	0.00%	0.00%	0.00%
■ More	12.90%	10.34%	6.45%	31.03%	3.23%	17.24%	0.00%	3.45%	0.00%	0.00%
■ Medium	29.03%	3.45%	3.23%	0.00%	19.35%	44.83%	3.23%	13.79%	0.00%	0.00%
■ Less	9.68%	6.90%	9.68%	3.45%	25.81%	13.79%	19.35%	41.38%	6.45%	37.93%
■ No	48.39%	31.03%	48.39%	20.69%	51.61%	20.69%	77.42%	41.38%	93.55%	62.07%

■ No ■ Less ■ Medium ■ More ■ Full

### ACCESS OVER RESOURCES

Resources	Chi square value	p value
Land	19.01	0.001*
labor	15.77	0.003*
capital	7.56	0.109
mass media	3.58	0.466
technology	9.74	0.021*

### CONTROL OVER RESOURCES

Resources	Chi square value	p value
Land	22.20	0.000*
labor	10.65	0.031*
capital	12.07	0.017*
mass media	8.74	0.033*
technology	8.75	0.003*

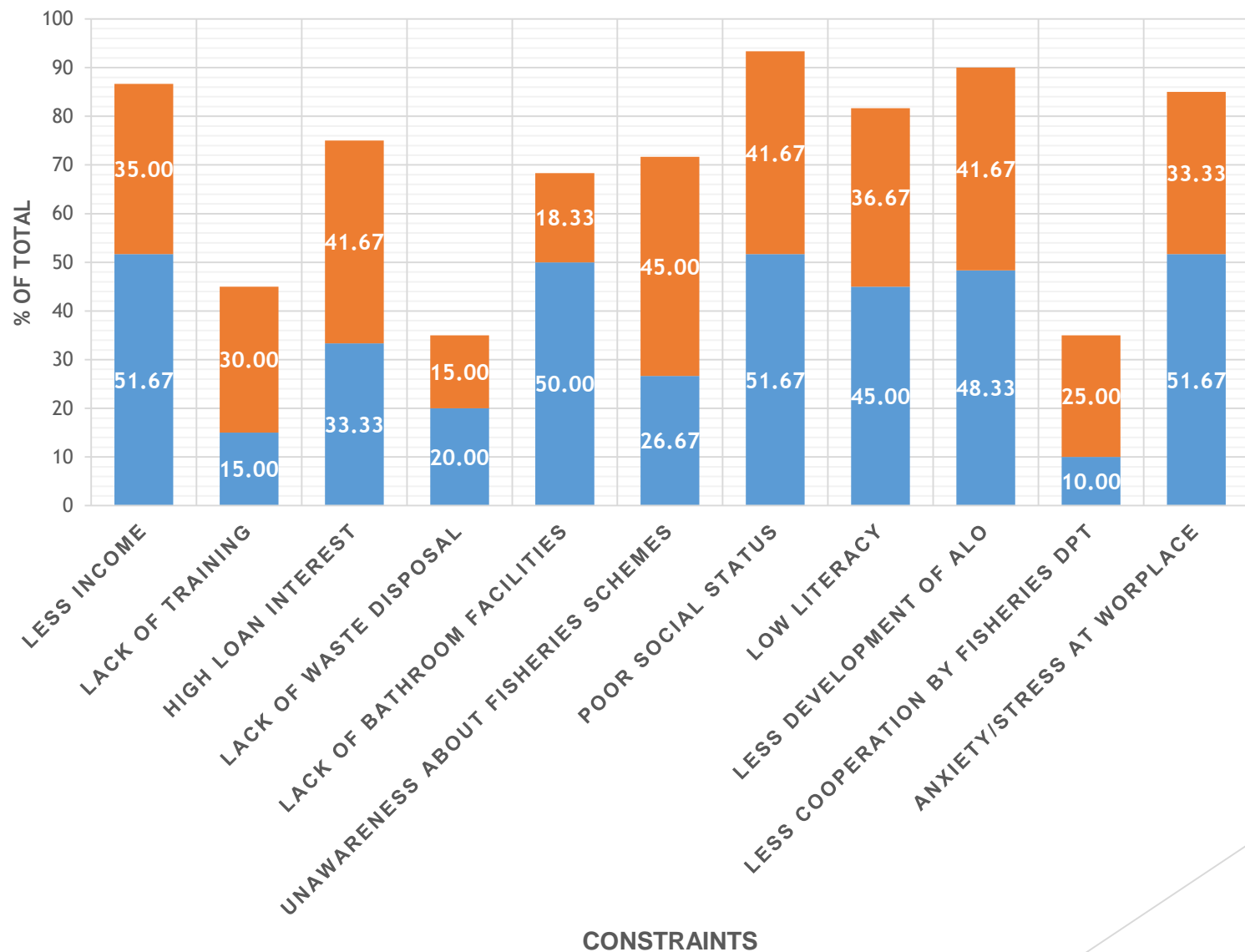


RESOURCES/SERVICES	GENDER	ALWAYS	SOMETIMES	NEVER
ACCESS TO LANDING CENTERS/MARKETS	Women	30.00%	11.67%	10.00%
	Men	28.33%	8.33%	11.67%
WORK INPUTS / MARKETING IMPLEMENTS	Women	0.00%	0.00%	51.67%
	Men	18.33%	5.00%	25.00%
WEATHER UPDATES	Women	0.00%	6.67%	45.00%
	Men	5.00%	13.33%	30.00%
POST HARVEST PROCESSING / MARKETING FACILITIES	Women	25.00%	18.33%	8.33%
	Men	20.00%	15.00%	13.33%
TRAINING ON POST HARVEST FISHERY ACTIVITIES	Women	0.00%	0.00%	51.67%
	Men	3.33%	3.33%	41.67%
RESOURCES / OPPURTUNITIES TO UPSCALE BUSINESS	Women	1.67%	3.33%	46.67%
	Men	8.33%	6.67%	33.33%

<b>Access over resources and services</b>	<b>Chi square value</b>	<b>p value</b>
<b>ACCESS TO LANDING CENTERS/MARKETS</b>	0.37	0.830
<b>WORK INPUTS / MARKETING IMPLEMENTS</b>	19.52	0.000*
<b>WEATHER UPDATES</b>	6.07	0.048*
<b>POST HARVEST PROCESSING / MARKETING FACILITIES</b>	1.16	0.560
<b>TRAINING ON POST HARVEST FISHERY ACTIVITIES</b>	4.58	0.101
<b>RESOURCES / OPPURTUNITIES TO UPSCALE BUSINESS</b>	4.61	0.100

# MAJOR CONSTRAINTS

■ Women ■ Men

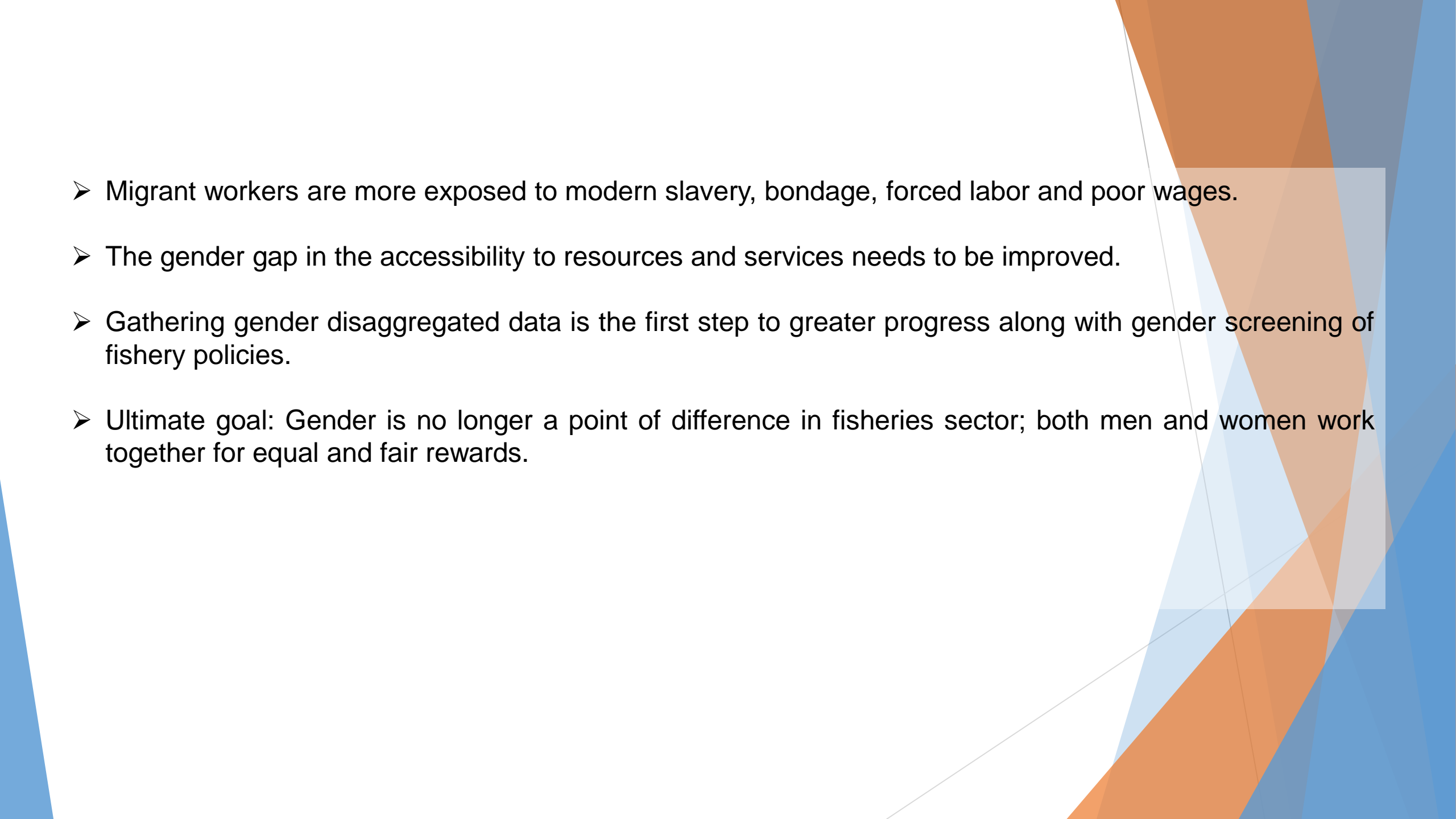


<b>CONSTRAINTS</b>	<b>Chi-Square Value</b>	<b>p value</b>
<b>Less income</b>	10.45	0.015*
<b>High interest on bank loans</b>	10.45	0.015*
<b>Less training/exposure visits in fisheries</b>	20.54	0.000*
<b>Lack of waste disposal in work place</b>	1.21	0.750
<b>Lack of proper washroom facilities</b>	30.67	0.000*
<b>Lack of awareness about different fisheries schemes</b>	15.88	0.001*
<b>Less cooperation by DoF</b>	11.24	0.010*
<b>Poor social status</b>	14.24	0.001*
<b>Low literacy level</b>	12.29	0.006*
<b>Less development of ALO</b>	2.23	0.526
<b>Anxiety and stress due to long working hours</b>	37.13	0.000*



## INFERENCE & CONCLUSIONS

- Although women population in post-harvest/secondary sector is significantly higher than men, they are socially and economically complicated in terms of income, social status, limited access to information and services, markets, social protection, decision making and leadership positions.
- Less development/adoption of Alternative Livelihood options could be a strong reason for poor social status of women.
- The lack of visibility and education is a chronic barrier to women in receiving fair wages like men working in secondary sector.
- Unlike men, women are largely engaged in reproductive roles than productive roles as they are more aware of social needs (food security, family well being).
- Safe working conditions, as well as equal pay for equal work and same access to fishery related decision making opportunities for women are highly essential as their male colleagues.

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- Migrant workers are more exposed to modern slavery, bondage, forced labor and poor wages.
  - The gender gap in the accessibility to resources and services needs to be improved.
  - Gathering gender disaggregated data is the first step to greater progress along with gender screening of fishery policies.
  - Ultimate goal: Gender is no longer a point of difference in fisheries sector; both men and women work together for equal and fair rewards.

THANK YOU

