### **Analysing the Fishing Community of Kashmir Through Gender Lens**

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**Theme- Voices of Young Gender Researchers in Fisheries** 



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### **INTRODUCTION**

Indian Fisheries Second largest fish producing country in the world - 7.56 % of global

production

Fish production (2019-20): **14.16** 

MMT; Inland: 10.43 MMT

(Economic Survey, 2021-22)



Total Fishermen: **2,80,63,537** 

Male : **56%** 

Female : **44%** 

(Handbook of fisheries Statistics, 2020)

- India is blessed with a number of fisheries like Marine, Inland, Brackish water, Freshwater, Ornamental and Cold water.
- Coldwater fisheries occupy an essential place in Inland fisheries in India

Jammu and Kashmir

- Major contributors to cold water fish production in India- 31% (DCFR, 2019)
- Production: 0.21 lakh tonnes

### INTRODUCTION AND BACKGROUND



Gender

Roles, behaviors, attributes, activities, and opportunities that are considered appropriate for women and men/girls and boys by society (WHO, 2018)



Study of disparities in conditions, participation rates, needs, access to resources and development, control of assets, decision-making powers between women and men in their assigned gender roles (FAO,2014)



Helps in finding gender gaps
Essential tool in planning and addressing inequalities in programs, policies.
(Srinivas, 2015 and EIGE, 2019)

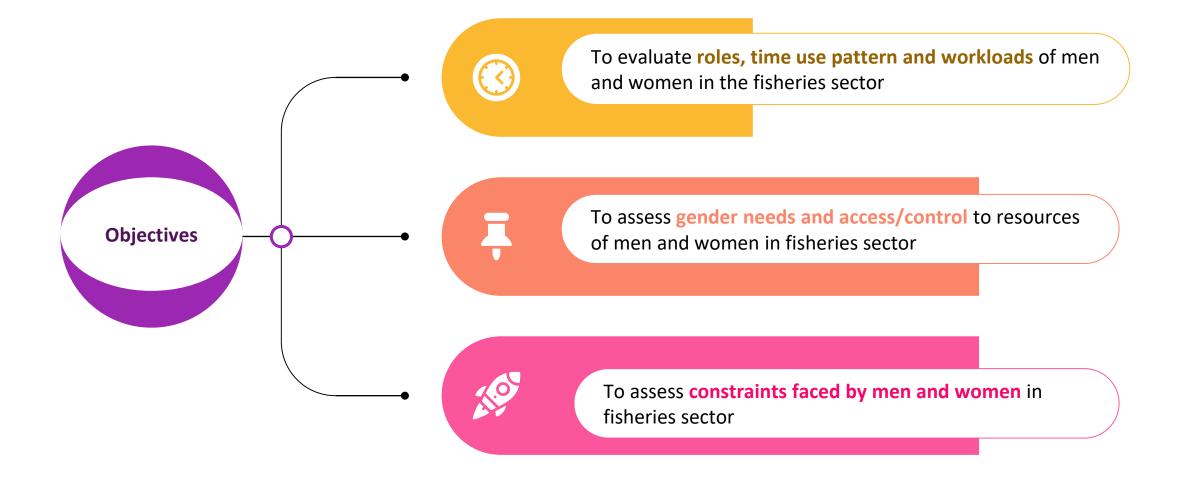


Ranked India at 135 out of 146 countries in its Global Gender Gap (GGG) Index for 2022

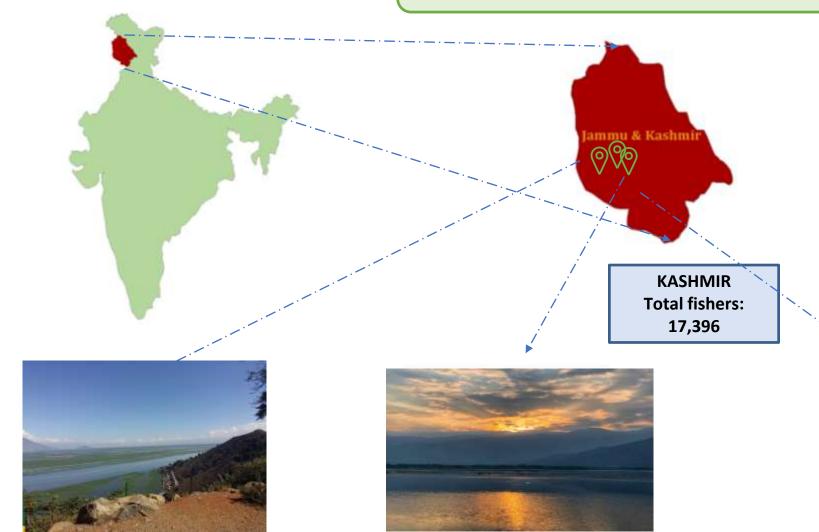
#### Rationale:

- Studies related to roles of men and women in fisheries have been studied in various countries and states of India, and detailed studies with time use pattern and workload measurement of men and women involved in the fisheries sector are few.
- **Few studies** in fisheries have been done with reference to fisherwomen in Kashmir like by Rather and Bhat (2017); Farooqi *et al.* (2018); Regu and Ananthan (2019).
- Lack of comprehensive study on gender analysis of fisheries sector in Kashmir.

## **OBJECTIVES**



## LOCALE OF STUDY



Fishers= 850

n=60

Fishers: 2500

n=60

70% of total fish production in J&K comes from these three lakes

N (Households)= 160
Men= 160
Women= 160
Total= 320 respondents



Fishers: 588 n=40

## METHODOLOGY

**Gender roles** 

**Time Use Pattern** 

Workload

**SGN and PGN** 

**Access and control** 

**Constraints** 

Moser's Triple role framework (Moser, 1986)

Activities: SNA, Extended SNA, and Non-SNA activities UNSNA (CEC, 1993)

Rate of Perceived Exertion (RPE) (Varghese et al., 1994)

**Moser framework: 5 point scale with scores** 

Harvard analysis tool: 5 point scale with scores

Weighted average (WA)

Percentage analysis

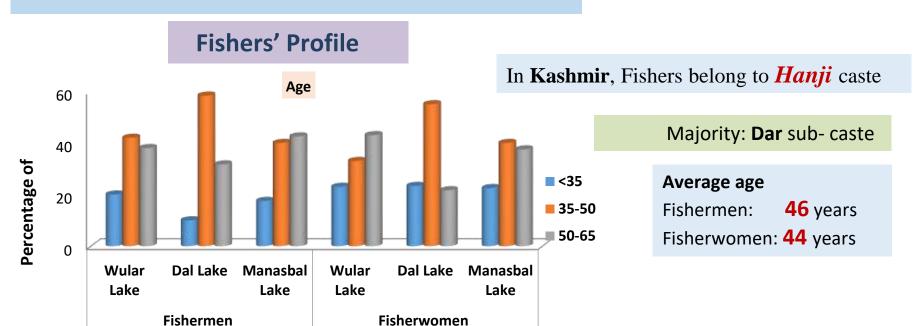
Mann-Whitney U test

Mann-Whitney U test

Mann-Whitney U test

Mann-Whitney U test

### **RESULTS AND DISCUSSIONS**



#### Age (Years)

#### Wular

Men: **35-50 (42%)**Women: **50-65 (43%)** 

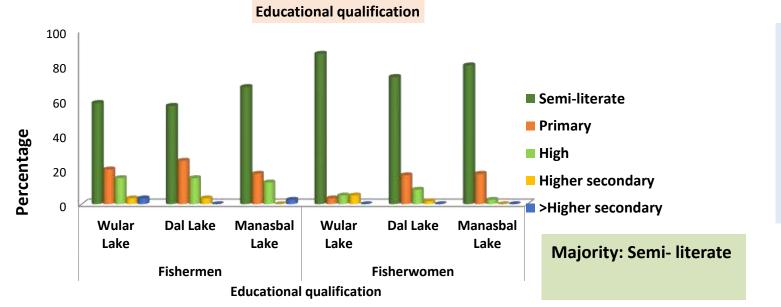
Dal

Men: **35-50 (58.3%)** 

Women: **35-50 (55.0%)** 

**Manasbal** 

Men: **50-65 (42.5%)** Women: **35-50 (40.0%)** 



#### Literacy rate

Fishermen: 40%; Fisherwomen: 20% which is lower

than the national and UT average.

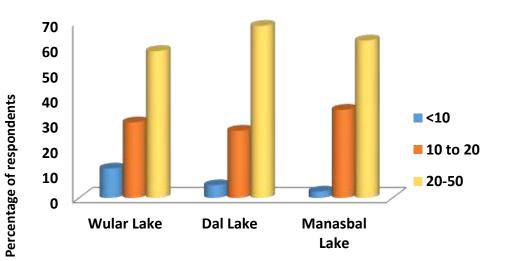
Literacy rate of India: 74.04%

Men: **82.14%**; Men Women: **65.46**.

Literacy rate of J&K: 67.16 %

Men: 76.75% and Women: 56.43% (Census, 2011).

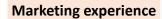
#### Fishing experience

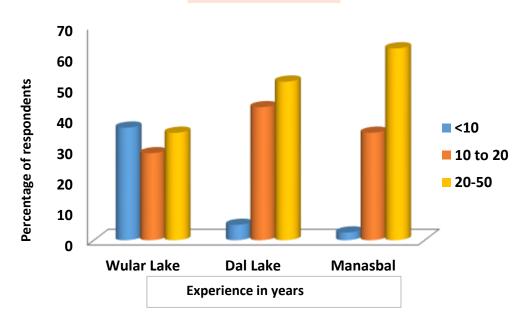


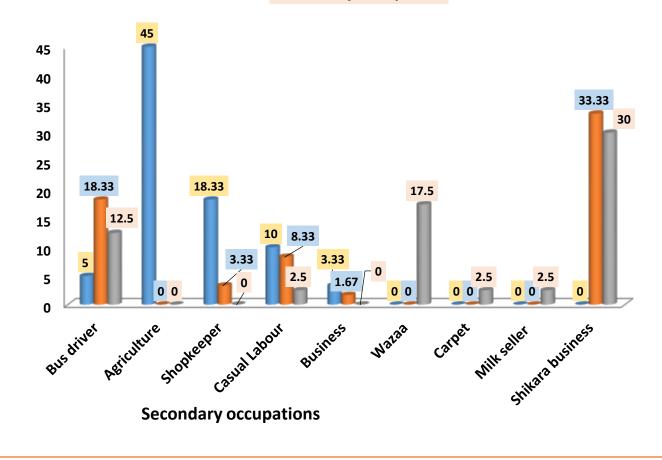
- Majority >10 years (Wular)
- 20-50 years (Dal and Manasbal)
- Average: 23 years

Majority: 20-50 years

Average: 28 years







Wular : Agriculture

**Dal** : Shikara business

Manasbal: Shikara business

■ Wular Lake

■ Dal Lake

■ Manasbal Lake

**Wular Lake** 

**Dal Lake** 

**Manasbal Lake** 

Average monthly income from fishing

Rs. 12,477.5

Rs. 12,320

Rs. 13,450

## **GENDER ROLES**

### **Wular Lake**

Roles	Household (%)
Reproductive	Fisherwomen (96.99%)
Productive	Fishermen (72.08%)
Social and community	Fishermen (75%)

Fisherwomen: Mainly in marketing

and related activities.

Fishermen: Mainly in fishing and

related activities

#### **Dal Lake**

Roles	Household (%)
Reproductive	Fisherwomen (99.9%)
Productive	Fishermen (62.49%)
Social and community	Fishermen (61%)

Fisherwomen: Mainly in marketing and related activities.

Fishermen: Mainly in fishing and

related activities

In **21.66%** of households **fisherwomen** involved in **fishing**.



#### **Manasbal Lake**

Roles	Household (%)
Reproductive	Women (79.3 %)
Productive	Fishermen (100%)
Social and community	Fishermen (66%)

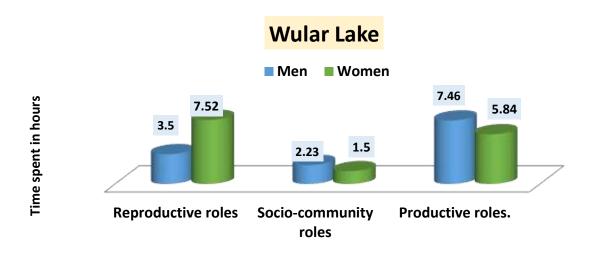
Fishermen: In both fishing and marketing activities

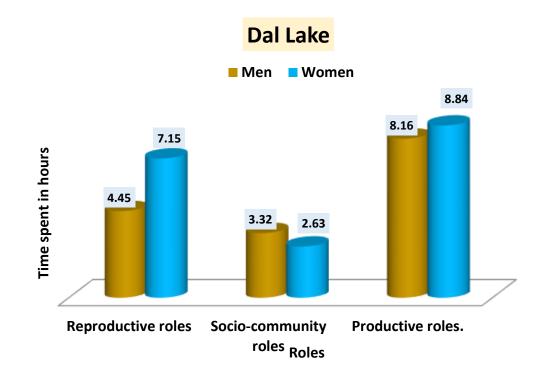




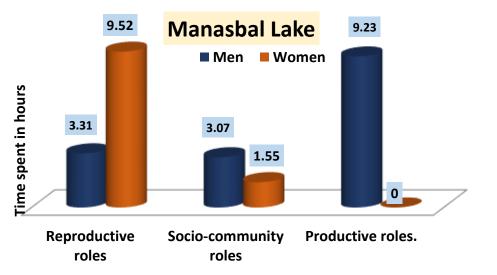


### TIME USE PATTERN









#### **Mann Whitney U Test**

Significant difference (p = < 0.001) between the men and women in time spent in reproductive, socio-community and productive roles in Wular , Dal and Manasbal lake.

**Roles** 

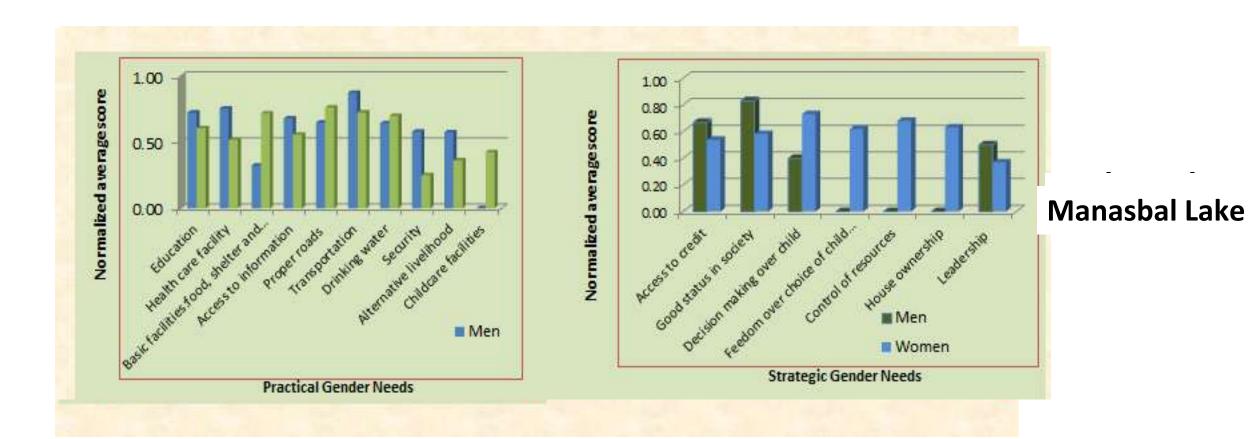
### RATE OF PERCEIVED EXERTION

Men	Women				
Wular Lake					
3.03 hrs.: Very light 0.45 hrs.: Light 0.30 hrs.: Moderately heavy 2.03 hrs.: Heavy 4.88 hrs.: Very heavy	<ul> <li>5.68 hrs.: Very light</li> <li>0.60 hrs.: Light</li> <li>1.27 hrs.: Moderately heavy</li> <li>5.8 Ohrs.: Heavy</li> <li>0 hrs.: Very heavy activities</li> </ul>				
Dal Lake					
4 hrs. : Very light  1.26 hrs. : Light  1.73hrs. : Moderately heavy  0 hrs. : Heavy  5.62hrs. : Very heavy	<ul> <li>1.14 hrs : Very light</li> <li>0.05 hrs : Light</li> <li>6.13hrs : Moderately heavy</li> <li>0 hrs : Heavy</li> <li>8.22 hrs. : Very heavy</li> </ul>				
Manasbal Lake					
3.26 hrs.: Very light 2.46 hrs.: Light 0 hrs.: Moderately heavy 1.10 hrs.: Heavy 4.57 hrs.: Very heavy	4 hrs. : Very light 0.10 hrs. : Light 5.42 hrs. : Moderately heavy 0 hrs. : Heavy 0 hrs. : Very heavy				

- Spent most time in **Very heavy** activities
- Spent most time in **heavy and very heavy** activities in Wular and Dal resp.

Yadav and Sharma (2017) reported that women were equally performing heavy activities like men in ornamental fish enterprise in Maharashtra

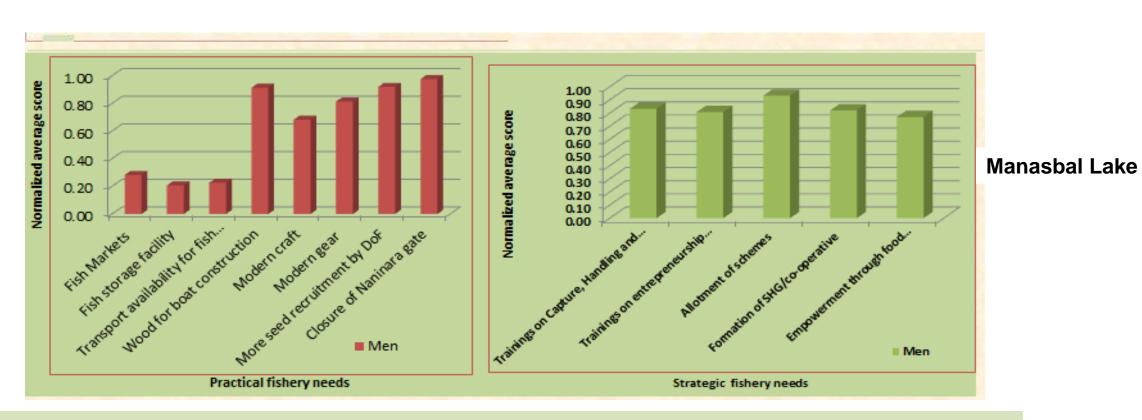
### **GENDER NEEDS**



#### **Mann Whiteny U test**

No significant difference between the fisherwomen and fishermen PGNs and SNGs in Dal and Wular Lake however,
 significant difference SGNs in Manasbal Lake.

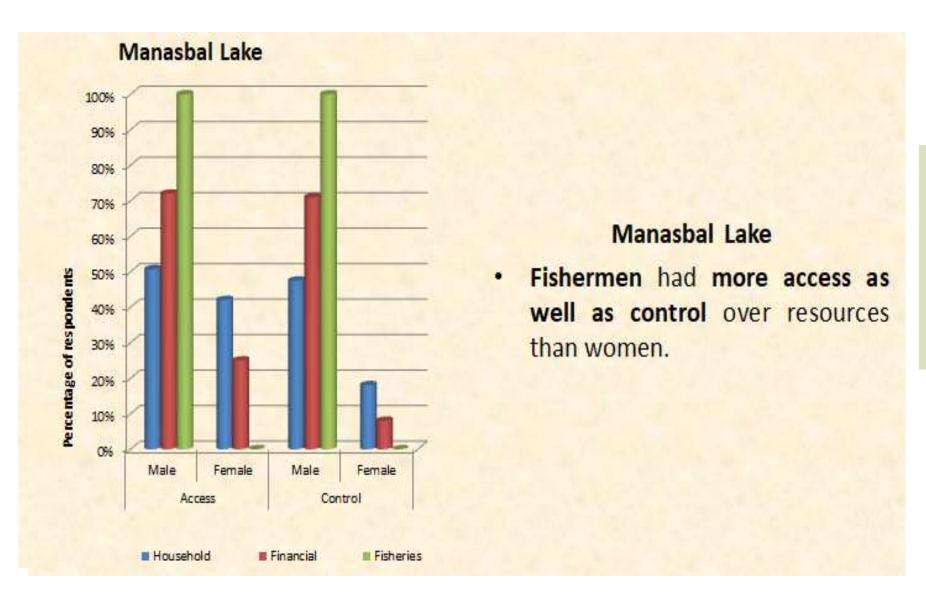
### **GENDER FISHERY NEEDS**



#### **Mann Whiteny U test**

Significant difference between the fishermen and fisherwomen in PFNs and SFNs in Wular and Dal lake.

## ACCESS AND CONTROL PROFILE



### Man Whitney U test

Significant difference in access and control between men and women over the household, financial and fisheries-related resources in all three lakes

### **CONSTRAINT ANALYSIS**

Constraints	Men and Women (n=280)		Men (n=160)		Women (n=120)		S/NS
	WA	Ranks	WA	Ranks	WA	Ranks	S/NS

- Significant difference with reference to the WA scores and the ranks between men and women in all constraints except political constraints.
- Need of conducting constraint analysis through gender lens and also shows that when men and women are considered together the constraints might not give a clear picture.
- Constraints faced by fishers in Kashmir have been also reported by Qureshi et al. (2013), Malik et al. (2017), Mir et al. (2019), Farooqi et al. (2018), Bhat and Sharma (2021).



### Occupational Hazards faced by fishermen

#### Long exposure to cold weather

 Raynaud's Frostbite

 Hypothermi Cold

а

 Fever, chest infection Dry skin

 Eye irritation Trench foot

 Asthma · Reduced sensation in feet

**Night work hours** 

**Dizziness** 

**Political instability** 

**BP** problems **Depression** 

**Conflict with DoF** 

Stressed life

Less catch/ income

Stress





**Hazards Of Temperature Extremes** 

**Ergonomic** 

**Psychosocial** 

**Physical** 

**Biological** 

Frozen surface on Naav (Craft)

Kangri

**Burnt Skin** (Nare Taet)

Frozen lake surface

Mud

Cuts

**Eve infection** 

Falls, Fracture

**Force exertion** 

Body pain: Back, shoulder, elbow neck, wrist pain, Sprain

Prolong static sitting on narrow part of boat

- Inflammation of veins
- Swelling in legs
- Stiffness

**Fish and Insects bites** 

**Fungus** 

Microbes in water



Pain, Itching

**Fungal infections** 

**Skin and Eye** infection

### Occupational Hazards faced by fisherwomen

#### Long exposure to cold weather

 Frostbite Raynaud's

 Hypothermi Cold а

 Fever, chest infection Dry skin

 Trench foot Eye irritation

 Asthma · Reduced sensation in feet

**Political instability** 

**BP problems Depression** 

**Conflict with DoF** 

Stressed life

**Hazards Of Temperature Extremes** 

**Ergonomic** 

**Physical** 

Fish fin/knife

Kangri

Burnt Skin (Nare Taet)

Cuts

**Falls** 

Frozen roads/path

**Psychosocial** 

**Biological** 



Body pain, Neck pain

Prolonged sitting on roadside

Knee/leg pain

**Fish and Insects bites** 

**Fungus** 

**Fungal infections** 

Pain, Itching









## CONCLUSIONS

#### **Roles:**

- **Involvement of women** is there in all 3 roles
- In Dal lake women are involved in fishing
- Men's role in reproductive is less and in productive is higher than women

#### TUS

- Study provided an in-depth understanding of local and distinctive gender arrangements that operate in fisheries sector of Kashmir and the opportunities such arrangements present for
- advancing gender equality.

men.

- Government policies will be less effective, or may not succeed, if the different impacts on women 23 and men are not taken into account.
- Lack of a comprehensive gender analysis can lead to conflicting policies
- Both men and women are involved in heavy/very heavy activities

#### **Gender Needs:**

- No significant difference (p= 0.263) between the fisherwomen and fishermen PGNs in Manasbal Lake however, there was a significant difference between the fisherwomen and fishermen SGNs in Manasbal Lake.
- Significant difference (p = <0.001) between the men and women in PGNs, SGNs, PFNs and SFNs in Wular and Dal lake.

#### **Access and Control:**

• Significant difference in access and control between men and women over the household, financial and fisheries-related resources in all three lake

#### **Constraints:**

• Significant difference with reference to the WA scores and the ranks between men and women in all constraints except political constraints

### Recommendations

- Gender specific policies, programmes and schemes are needed to bring sustainable and equitable development in Kashmir.
- Collective voices of fishers is missing in Kashmir. There is a need to form fisheries co-operatives/FPOs in Kashmir.
- Awareness about different sustainable management of fishing resource is needed.
- **Gender sensitive** management
- State level Co-ordination Committee should be set up for addressing inter sectoral issues.
- Fisheries Census should be done.
- Well organized markets with basic facilities should be set up by DoF.
- Integrate the occupational safety issues of fishers in development planning of fisheries.
- Occupational safety should be encouraged within the different value chains of fisheries.

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