Soft Skills and Hard Constraints in Post Harvest Chain: A Case of Small Scale Fish Processing
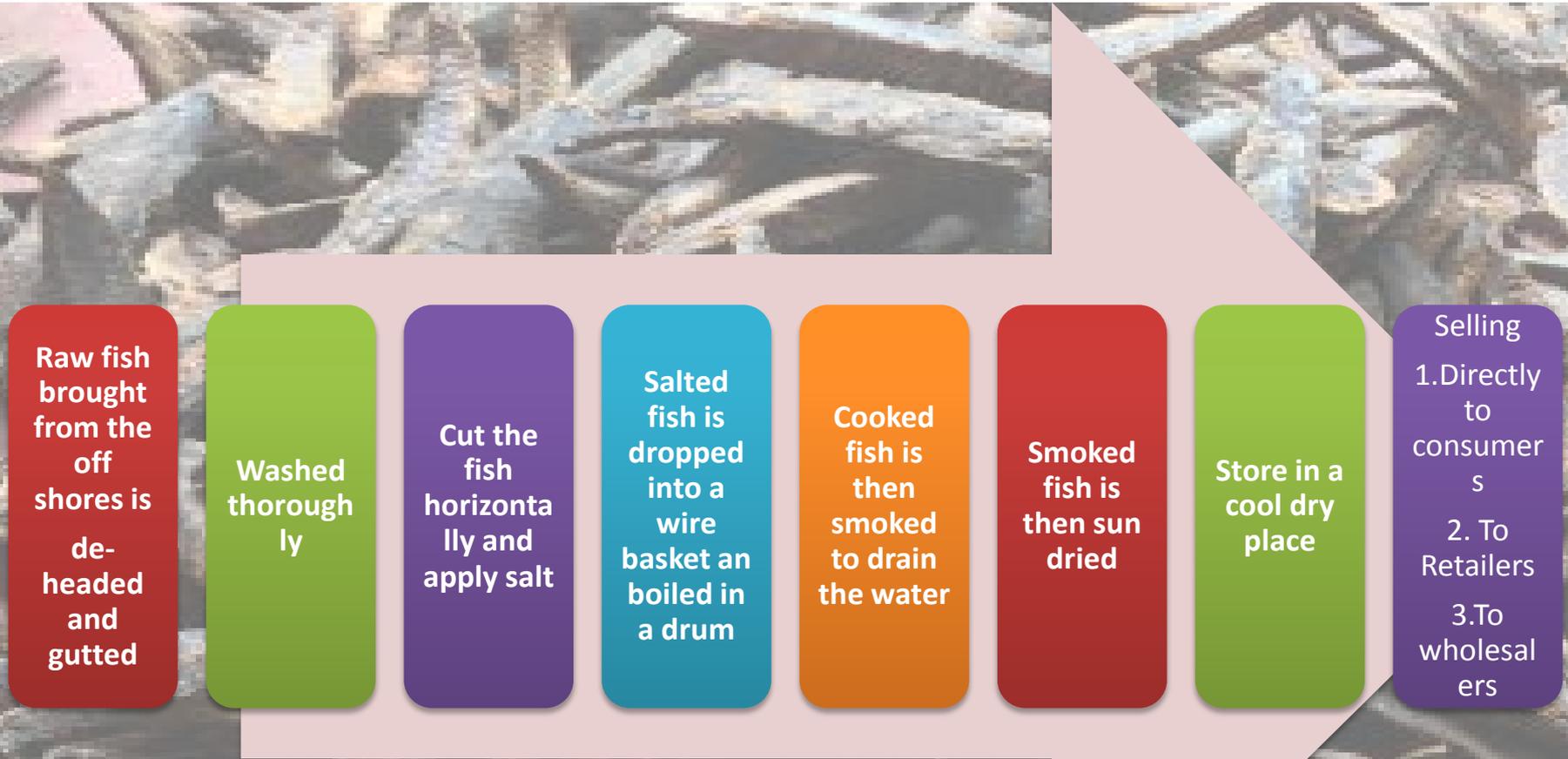
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Introduction

Soft Skills is used to indicate all the competences that are not directly connected to a specific task but are necessary in any position as they mainly refer to the relationships with other people(Cimatti,2016).

Hard constraints are the factors that limit or control something.

Post Harvest Chain: Maldives fish processing

Raw fish brought from the off shores is de-headed and gutted

Washed thoroughly

Cut the fish horizontally and apply salt

Salted fish is dropped into a wire basket an boiled in a drum

Cooked fish is then smoked to drain the water

Smoked fish is then sun dried

Store in a cool dry place

Selling
1.Directly to consumers
2. To Retailers
3.To wholesalers

Loading of the raw fish bought from the off shores at the point of processing of Maldives fish

Boiling the fish in drums using firewood

Unloading the boiled fish

The boiled fish is then laid on a hearth in order to drain the water. This is done by smoking.

Sun drying by keeping in racks

Storage

Research Problem

- The involvement of women in the Maldives fish post-harvest chain is un-recognized ,under estimated and less acknowledged.

- Female processors contribution to the household economy was significant and non measured

- Thus it was deem appropriate to identify the gender based soft skill gap along with hard constraints associated and finally to develop strategic interventions to upgrade livelihood.

Research Objectives

Broad Objective

- To assess the soft skills and hard constraints associated in the post harvest chain of small scale fisheries.

Specific Objectives

- To identify gender basis soft skill levels of the post harvest chain.

- To find out the soft skill gaps in post harvest chain

- To identify the gender based hard constraints exist in post harvest chain.

- To develop strategic interventions for post harvest chain.

Research Method

Research Area: *Kottegoda* Fishing Community, Southern coast of Sri Lanka

Research Method

- The study was based on case study approach and 10 Maldive fish processing households in the Kottegoda fishing community were considered; including 5 female fishers and 5 males

- Participatory tools and focus group discussions were used to gather primary data and developed,

- **Gendered soft skill inventory**

- **Gender skill gap analysis**

- **Diamond of pros and cons**

Results and Discussion

Soft Skill Inventory

Soft Skill	Females	Males
Learning the Technical Know how	•Learnt from their parents and is aware on the general processing method of Maldives Fish. •Aware on the health hazards due to usage of ash which was practiced traditionally to intensify the colour of Maldives fish	
Innovative skills		
Product innovations	•Most commonly used fish species is Skipjack tuna (**Katsuwonus pelamis**) Sinhala name: *Balaya*	
Process innovations	•Ingredients: Raw fish (particularly Skipjack tuna),salt 3 of the studied cases used Malabar tamarind (**Garcinia cambogia**)g to enhance the taste •Energy source: Fire wood •Quality and food safety: Minimum knowledge	•Same as in females •But none of them practiced adding Malabar tamarind (**Garcinia cambogia**) in processing •One studied case practiced selling bottled powdered Maldives fish
Packaging innovation	•No packaging material designed. • Sold to customers either by wrapping in a newspaper or filling into polythene sacks	

Soft Skill Inventory

Soft Skill	Female	Male
Decision Making Power	•Female participation was high in decision making on processing and marketing.	•Men took over the control of buying raw materials particularly the raw fish
Positive attitude of the business	•Females attitude towards the business was positive	•Prefer fishing more than processing
Negotiation Skills	•Exhibited higher negotiation ability than men particularly when bargaining with the price of Maldives fish	•Less compared to females
Flexibility	•Agreed to adapt to changes in the process	
Team Player	Maldives fish processing is a team work, where all the family members get together. However they would hire labour on the day when raw fish is loaded.	
Personal device Smartness	•Use mobile phones for their day today business transactions.	
Social Interactions	•Higher than men	•Less compared to men

Unhygienic Storage of Raw Fish

Boiled Fish ready for smoking

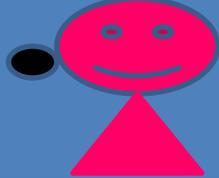Unhygienic Storage of Maldives Fish

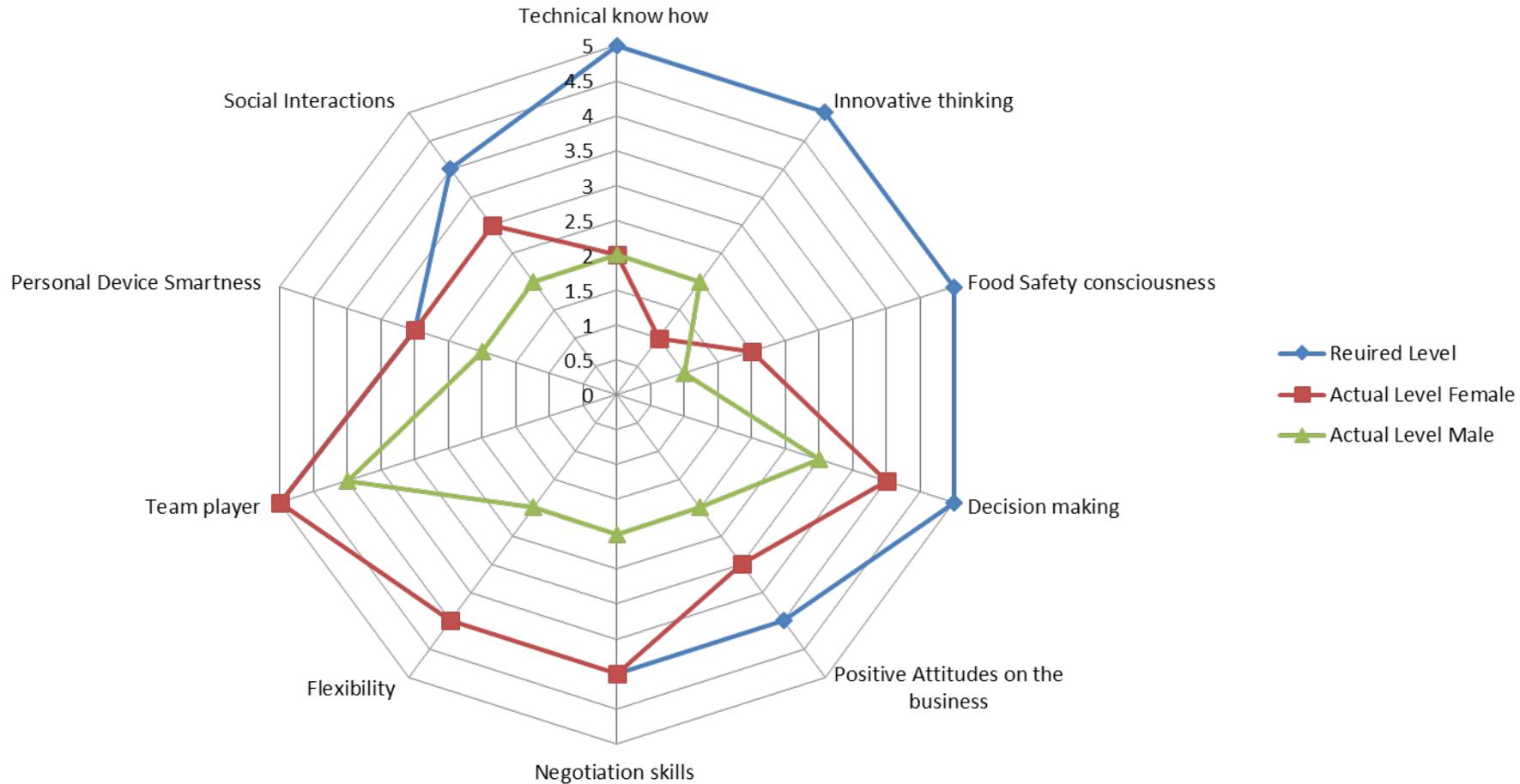Packed for selling

Soft Skill Gap Analysis

•This examines the gap between actual skill level and expected soft skill level with a comparison between male and female.

• The required level of soft skills is ranked from 1 to 5

(1- Unimportant, 2- Less important, 3 - Somewhat important, 4 – Important, 5 - Very Important)
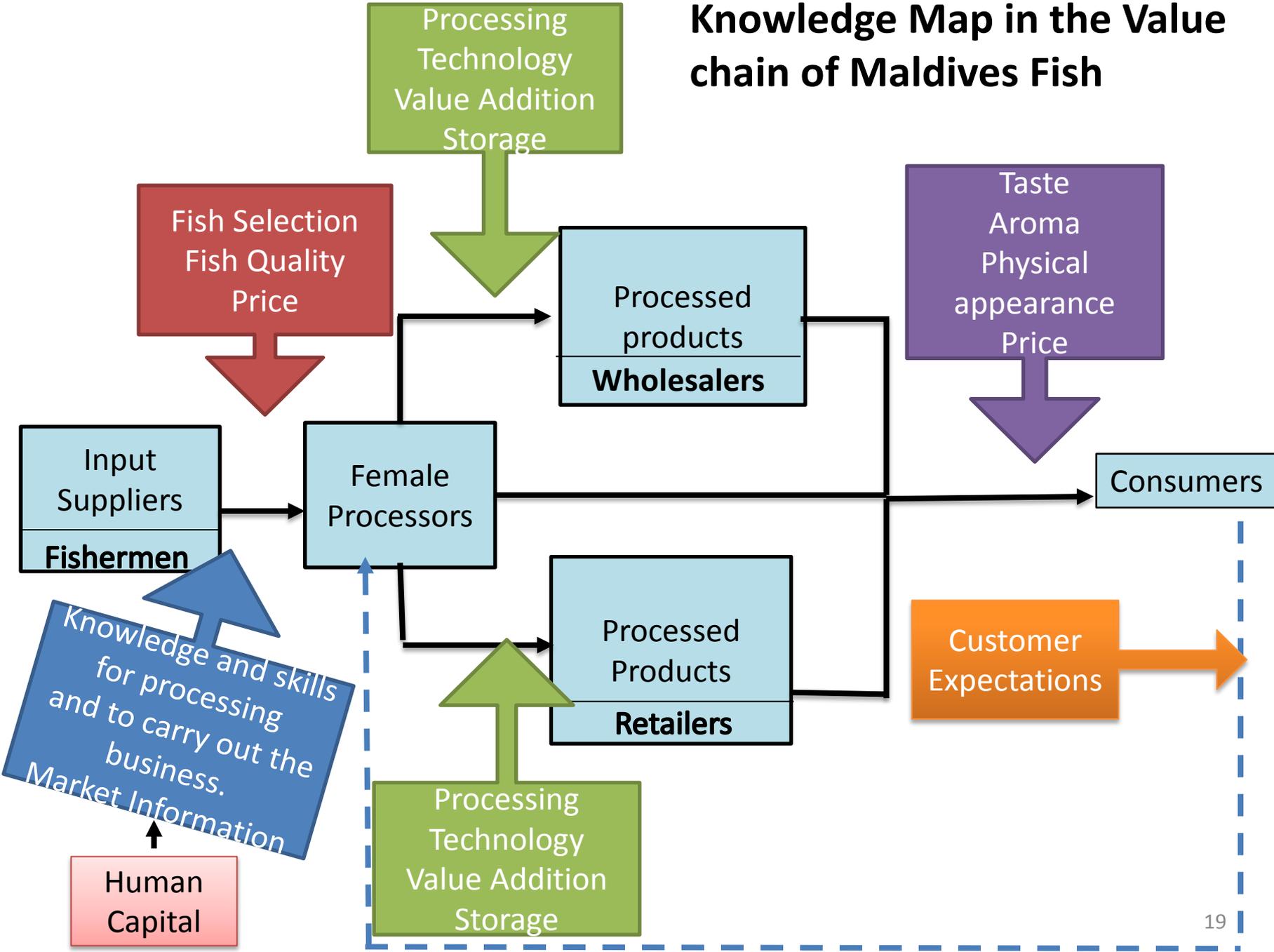
Soft Skill Gap Analysis

Soft Skills	Required Level	Actual Level	Actual Level
Technical know how	5	2	2
Innovative thinking	5	1	2
Food Safety consciousness	5	2	1
Decision making	5	4	3
Positive Attitudes on the business	4	3	2
Negotiation skills	4	4	2
Flexibility	4	4	2
Team player	5	5	4
Personal Device Smartness	3	3	2
Social Interactions	4	3	2

Source: Author complied data based on 10 cases in *Kottegoda* fishing community

Soft Skill Gap Analysis

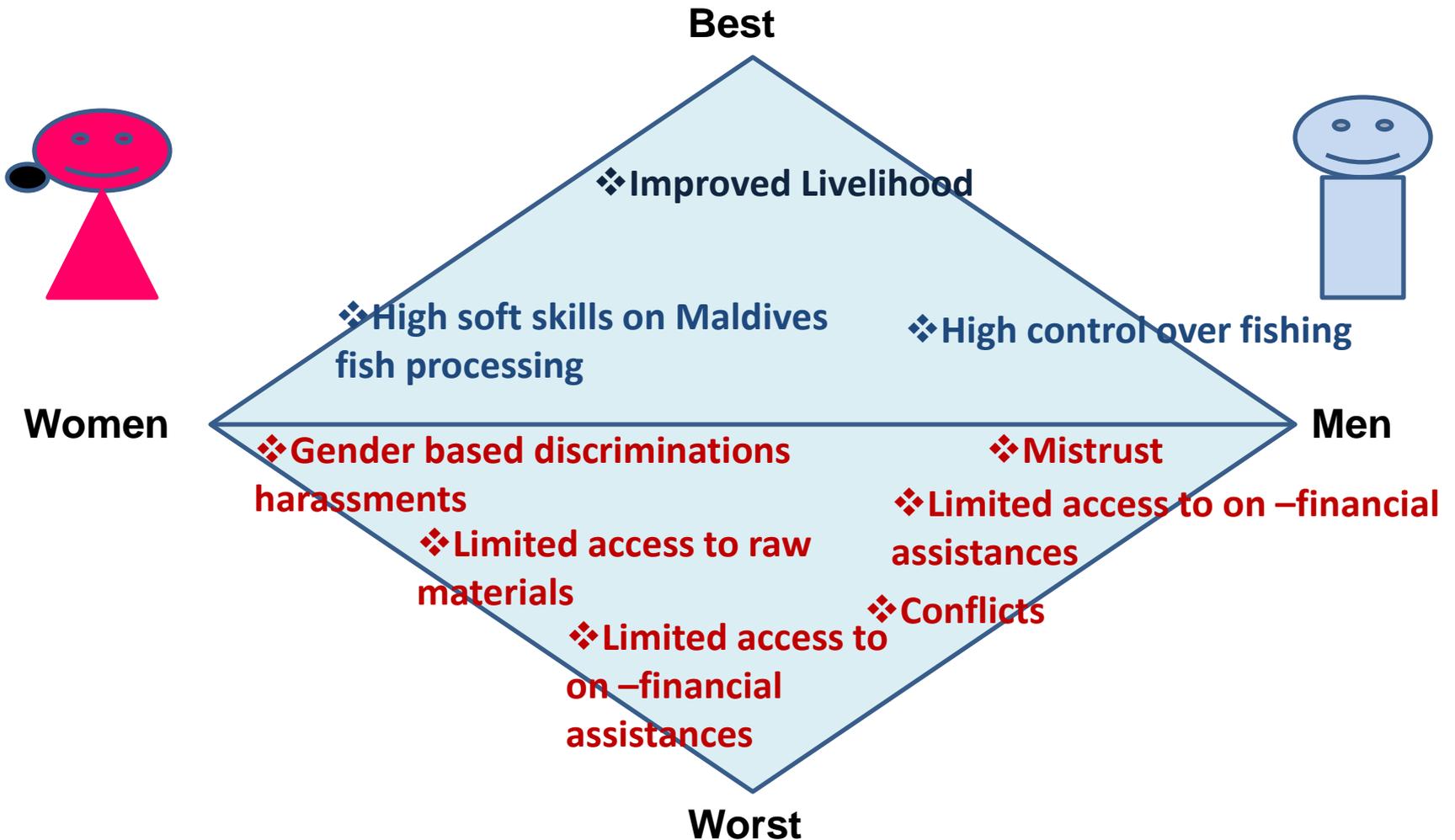# Knowledge Map in the Value chain of Maldives Fish

Hard Constraints

Soft Skills	Hard Constraints associated
Innovative thinking	•Limited access to raw materials, on accessible finance and market logistics especially by female fishers •Unavailability of processing machines and equipments (crushing Maldives fish) •Unaware on the correct procedure of processing dried fish
Food Safety consciousness	•Lack of trainings and prejudices that their method is correct
Social interactions	•Particularly females face gender based discriminations, harassments and grievances which discourage their involvement

Source: Author complied data based on 10 cases in *Kottegoda* fishing community

Maldives Fish Post Harvest Chain: Diamond of Pros and Cons

Best

Women

Men

❖**Improved Livelihood**

❖**High soft skills on Maldives fish processing**

❖**High control over fishing**

❖**Gender based discriminations harassments**

❖**Mistrust**

❖**Limited access to on –financial assistances**

❖**Limited access to raw materials**

❖**Conflicts**

❖**Limited access to on –financial assistances**

Worst

Conclusions

- Female fishers were rich in soft skills compared to males.

- Lack of technical knowhow on postharvest management, processing and value addition, poor concern on safety and hygiene and low level of innovativeness are considered as the soft skill gaps.

- However female participation was high in in decision making on processing and marketing and showed strong negotiation skills.

Conclusions

- Gender based discriminations, harassments and grievances discourage their involvement as well as limit new entrants.

- Off the nets and boat practices of female had adversely affected on the quality and quantity of raw materials.

Recommendations

- Gender empowerment interventions on soft skill development were an essential need to upgrade the post harvest chain.

- Market oriented processing and value adding package will help to brake the hard barriers.

References

- Cimatti, B., (2016). Definition, Development, Assessment of Soft Skills and their Role for The Quality of Organizations and Enterprises. *International Journal for Quality Research*, pp 10.

- Export Development Board, (2017).Industry Capabilities,Sri Lankan Fisheries Report

- Jayantha S.P.M and De Silva D.A.M, (2010). Supply Chain Management in the Aquaculture Industry: The Case of Food Fish Aquaculture in Sri Lanka, *Sabaramuwa University Journal,* pp 147-169 ISSN 1391-3166

THANK YOU