

Gendered Timeline of the Market Landscape of the Fisheries Industry in Sri Lanka

Sabaragamuwa University of Sri Lanka

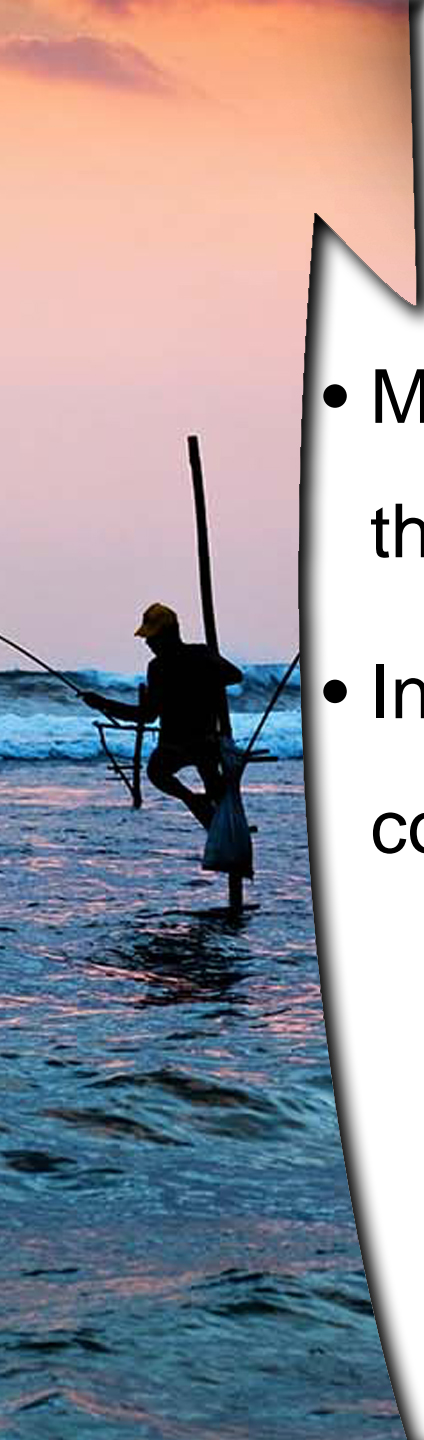
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Introduction

- Marine fish industry is playing a vital role in country's economy through the counted and uncounted ways
- Industry means of livelihood for more than 2.6 million people and contributing national GDP from 1.5% (DOFA, 2015)



Introduction *cont.*



Research Problem

- Market mix variables and its behavior throughout the timeline was changed sequentially with the changes of technology, knowledge, information as well as attitudes and values
- Therefore it was deemed appropriate to figure out how the gender role was changed in marine fish value chain with the changes of marketing mix variables in the time line



Research Objectives

- To investigate the market mix variables in the domestic market place and to identify timeline of the gender involvement in fisheries industry
- To develop the market landscape for marine fish industry in Sri Lanka including gender contribution



Research Methodology

- Rapid market chain analysis was the key process to collect both primary & secondary data
- Key informants of the marine fish value chain, industry specialists & the government institutions were the key respondents
- Field observations were carried out to identify the changes of product, promotion, distribution and place strategies and gender involvement
- Collected data was analyzed and identified with the special criteria accordance with the product, price, place, promotion, people, physical evidence and process to develop the timeline and market landscape of marine fish sector



Results and Discussion

Timeline - Product

Time Line of market mix variables



Ancient Time

- High quality peel & Chank
- Positioning "Peel of the indian ocean"

British Regime

- High quality pearl, pearl oysters, chank beche de mer
- Value added by drying & smoking



1940 - 1960

- Coastal fish more prominent
- Poor quality & higher post harvesting losses
- No specific brand names
- Seer paraw balaya kelawalla blood fish

1960 - 1980

- More available low quality imported products
- CFC brand established locally
- Exported shark fins beche de mer, chank & shells
- Poor technology for exporting products
- Seer paraw balaya kelawalla blood fish shark skate rockfish



1980 - 2000

- More available deep sea products
- Exported grade i & ii locally grade iii products
- Tuna products for international markets
- Increasement of using labeling & packing
- Quality upgradation Ice & procesing plants
- Women engauged in product development

2000 - 2015

- Costal & deep sea fish available
- Sri Lankan Tuna, Shrimp higher in position in international market
- Locally canned fish available (60 Brands)
- "CEYFISH" brand established
- Having certificates & standards
- Value added fish products in minimal level
- Skin, born removed fish available



Results and Discussion *cont.*

Timeline - People



Ancient Time

- Pearl fishermen
- Divers from South India & Arabia
- Export agents

British Regime

- Fishermen/Women
- Muslim merchants
- South indian labours
- Boat operators
- Women processors

1940 - 1960

- Fishermen/Women
- Mobile Vendors
- Ceyloan co-oparate fish sales union
- Whole sellers
- Women dry and Maldives fish processors
- Women Retailers

1960 - 1980

- Fishermen/Women
- Processors
- Mobile vendors
- Whole sellers
- Retailers
- Women dry and Maldives fish processors,
- Women Retailers
- factory workers

1980 - 2000

- Fishermen/Women (68,900)
- Processors
- Mobile vendors ETC..
- Women dry and Maldives fish processors,
- Women Retailers, Factory workers, Quality control officers

2000 - 2015

- - Factory workers, Quality control officers, Researchers,
- Administration level people (42.8% - women and 28.5% men MFARD)
- scientists (33.3% women in NARA) and researchers (60% men and 40% in UR, 44% women and 55.5% men OUSL, 95% maen and 5% women WUSI)



Results and Discussion *cont.*

Timeline - Place



Ancient Time

- No specific market place
- Surrounded by Coastal areas

British Regime

- Village & town boutiques in costal
- Roadside & junction selling points & stalls
- (Women Involved)



1940 - 1960

- Fish retail stores
- Weekly village fairs
- Village & town boutiques in costal
- Roadside & junction selling points & stalls
- Mobile vendors
- International market
- (Women Involved)

1960 - 1980

- CFC whole sales
- St.john`s fish market
- Private retail fish stalls
- Weekly village faires
- Mobile vendors
- International market
- (Women Involved)



1980 - 2000

- CFC retail outlets
- St.john`s fish market
- Private retail fish stalls
- Weekly village faires
- Mobile vendors
- Supper markets
- Regional wholesales markets
- International market
- Women in Fish exporting factories, super markets, quality control units

2000 - 2015

- Paliyagoda central fish market complex
- Mobile vendors
- Supper markets
- Regional wholesales markets
- CFC retail outlets
- Laksathosa
- Co-Opicity
- Fish Mela
- E-Market place
- M-Market place
- International market



Results and Discussion *cont.*

Timeline - Price



Ancient Time

- Value pricing for pearl

British Regime

- Value pricing for pearl
- Marginal cost pricing for fish



Price Discrimination...for the Good!



1940 - 1960

- Price discrimination according to seasons and off seasons
- Marginal cost pricing

1960 - 1980

- Price discrimination according to seasons, off seasons and festival seasons
- Marginal cost pricing
- Contribution pricing by CFC

Women engaged in pricing strategy determination



1980 - 2000

- Price discrimination according to seasons, off seasons and festival seasons
- Marginal cost pricing
- Contribution pricing by CFC
- Target pricing for international market

2000 - 2015

- Price discrimination according to seasons, off seasons and festival seasons
- Marginal cost pricing
- Contribution pricing by CFC
- Target pricing for international market
- Lossleader, Target pricing, fullcost in supper markets
- Tender pricing for mass quantity



Results and Discussion *cont.*

Time Line- Physical Evidence



Ancient Time

-Available whole fish and pearl, chanks only in coastal areas.

-Due to physical unavailability, people live in center of the country did not have proper idea about fish products



British Regime

--Not having architectural evidence for people live in center of the country yet

-Available whole fish and pearl, chanks only in coastal areas.



1940 - 1960

-Mostly available in coastal areas
Women Involved

-Not having architectural evidence for people live in center of the country yet

-Having evidence where mobile vendors were available



1960 - 1980

-Island wide distributed and available but not up to required demand

-Available whole fish and cut pieces

-Imported canned fish also distributed



1980 - 2000

-Available whole fish and cut pieces

-Imported canned fish available in island wide

-Processed fish, whole fish, cut pieces available in market

-With improvement of storage facilities availability were high



2000 - 2015

-Bones, dark meat, belly meat and skin is removed available

-Low availability of whole fish in markets

-Women engaged in Ready to cook types, processed fish are available

-Transparent Package with informative label



Results and Discussion *cont.*

Timeline - Process



Ancient Time

-Use poor technology for fishing

(Beach Seine, Stake Net, Fish Kraals [Jakotu])

British Regime

-Used traditional techniques for fishing

-Practiced Post-harvest processing like Sun-drying and smoking

-Trawler Fishing Operation began



1940 - 1960

-Practiced Post-harvest processing like Sun-drying and smoking

-Mother ship operation through "Halpha" and "Seer" initiated

-Introduced Out-Board motors in to traditional crafts

-Number of motorized boats increased

-Post harvesting losses were high

1960 - 1980

-Post harvesting losses were high (40%)

-Number of motorized boats increased

-Maintain regular production

-Storage facilities were low

- Women – Grading, fish processing,



1980 - 2000

-Maintain regular production

-Using internationally approved processing plants

-Established ice plats for storage requirements

-Use various methods to reduce post harvesting losses

-Use quality packaging materials

2000 - 2015

-Maintain tested and approved method for selecting best quality fish

-Follow the International standards for grading, packing and shipping

-- Women – Grading, fish processing, quality controlling, administrating, engaging in researches , certification



Results and Discussion *cont.*

Timeline - Promotion



Ancient Time

- By gifting kingdom to kingdom
- By travelers (Iban bantuta, Robert Knox)

British Regime

- By gifting
- By mobile vendors
- Vocal promotions



1940 - 1960

- By mobile vendors
- Vocal promoters
- Promotion of Co-op unions

Women engaged in promotion as members of marketing organizations

1960 - 1980

- By special offers CFC
- By mobile vendors
- By newspaper articles



1980 - 2000

- By news paper articles
- By special offers CFC
- By Banners on CFC lorries
- By mobile vendors

2000 - 2015

- By web sites Government Exporters Supermarkets
- By exhibitions
- Special offers of Spper markets CFC
- By health programes on TV & Radio



Results and Discussion *cont.*

Market Landscapes

Ancient to British Regime Market Landscape

PRODUCTION

Ancient people (Mas wadda) done fishing for the survival

Pearl, Chank, Beche de mer were prominent



Only male engaged
Female only contributed for Cooking and childcare

MARKET PLACE

Local Market

No commercial market place

Jaffna, mannar ports acted as market places



MARKET TREND

Local Market

Exchanging was reported among kingdoms

18th century

- Commercial fishing
- Export oriented fishing



DISTRIBUTION

Local Market

Only in costal areas by on foot vendors



CONSUMERS

For pearl & chank there was no local consumers

Higher demand in asian countries



Results and Discussion *cont.*

1940 - 1965 Market Landscape

PRODUCTION

Production of 1965
- 87,071 Mt

Sub Sectors

Deep Sea -85,547Mt	Costal -1,524Mt
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Costal Fish Production is Dominant & Women engaged in Fish Handling and Grading

Highest Production in
- Negambo, Puttalam, Jaffna

Major Species

- Small varieties
- Rock Fish
- Balaya

In - board engine introduced for fishing boats (1955-1965)



MARKET PLACE

Local Market

- Weekly Fairs
- Middle men or "Malu Mudelali"
- Roadside & junction sale
- Village & town boutiques
- Women Involved in retailing

1st retail fish stall started



MARKET TREND

Local Market

Ceylon co -operative fish sales union was handled the market
(Before 1964)

Price control brought on fish products - 1944

"Price increasement occur due to cyclone - 1964"



DISTRIBUTION

Local Market

Distribution by -
Mortar bike
Bicycle, On foot vendors

fish sent to colombo from landing centers on consignment basis.



CONSUMERS

- Limited customer base
- Exchanging was done as gifts



Results and Discussion cont.

1965 -1985 Market Landscape

PRODUCTION

Production of 1975
- 113,833 Mt

Sub Sectors

Deep Sea -114,863Mt	Costal -970Mt
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Costal Fish Production is Dominant

Highest Production in

- Negambo, Mannar, Jaffna

Women involved in maldives fish and dry fish processing

Increase the deep sea production because of introducing multi-day fishing boats



MARKET PLACE

Local Market

Retails -

- CFC Outlets (17)
- CFC Mobile Fish Outlets
- Women were engaged
- Weekly Fairs
- Middle men or "Malu Mudelali"

Whole Sales -

- St. Johns Fish Market
- CFC



MARKET TREND

Local Market

- CFC entered to wholesale marketing & foreign/Joined venture vessels (1964)
- Multi day fishery improved local marketing & export trade
- Locally & monopolist market trend

- Export Sector

- Private sector involvement was low.
- 2%-3% exported
- Women engaged as factory workers

- Import Sector

Products -

- Maldive Fish
- Canned or preserved fish

"Nearly a quarter supplied through imports"

DISTRIBUTION

Local Market

Distribution by -
lorry, and mortar bike
Bicycle, On foot vendors

Highly localized distribution network pivoting on each landing areas

Distribution inefficiencies were high



CONSUMERS

- Contribution of fish to food basket 4.9%
- Increasing demand to CFC fish



2 Categories

Upper & upper middle class-

- Seer, Tuna

Lower middle and working class

- Skate, Rock fish



Results and Discussion cont.

1985 -1995 Market Landscape

PRODUCTION

Production of 1995
- 217,500 Mt

Sub Sectors

Deep Sea -60,000Mt	Costal -157,500Mt
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Costal Fish Production was Dominant & Women involved in grading & Processing

Highest Production in
- Shore, Shark & Balaya



MARKET PLACE

Local Market

Retails -

- CFC Outlets
- CFC Mobile Fish Outlets
- Private Regional Retails
- Weekly Fairs
- Middle men or "Malu Mudelali"

Whole Sales -

- St. Johns Fish Market
- Regional Whole Sale Markets
- CFC

International Market

- Japan
- USA
- Singapore
- Hong-Kong



MARKET TREND

Local Market

Nearly 1/4th of the total was supplied through imports

CFC directly involved to exporting

- Export Sector

- Private sector involvement was low.
- Main export product was Shell Fish
- Women engaged as factory workers and in quality controlling

- Import Sector

Products -

- Maldive Fish - 4%
- Canned or preserved fish - 29%

DISTRIBUTION

Local Market

Distribution by -
lorry, van and mortar bike
Bicycle, vendors

-Low Storage Facilities

-No specialist group for fish transportation



CONSUMERS

- Contribution of fish to food basket 5.8%
- Demand was high in coastal and urban areas



2 Categories

Upper & upper middle class-

- Seer, Para, Thalpath

Lower middle and working class

- Salaya, Hurulla

Results and Discussion cont.

1995 -2005 Market Landscape

PRODUCTION

Production of 2005
- 130400Mt

Sub Sectors

Deep Sea -66,710Mt	Costal -63,690Mt
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Women involved in Grading and processing

Highest Production in
- Negambo, Matara

Major Species
- Shore & Balaya

- Drastic reduction due to
Tsunami 2005

- Reduction of Northern
Province Production Due
to Civil War



MARKET PLACE

Local Market

Retails -

- CFC Retails - (Only in Urban Cities)
- CFC Mobile Fish Outlets
- Private Regional Retails
- Few Private Super Markets
- Weekly Fairs

Whole Sales -

- Pettah Fish Market
- Regional Whole Sale Markets

International Market

- Japan
- UK
- Greece
- Singapore
- Netharland



MARKET TREND

Local Market

- 90%** Handle By Private Sector
- 10% By CFC
- Price Fluctuation Due to
 - Tsunami
 - Fuel Price Increase

- Export Sector

- Declined Due to Tsunami
- **Worked as factory workers in canned fishing, shrimp production**
- **Engaged as quality control and certification officers and, audit officers**

- Import Sector

Products -

- Maldiv Fsh, Canned Fish,
- Edible Fish,

Countries -

- Maldives, India, Pakistan
- Singapore, UAE

(Rapid Increase Due to Low Local Production - 2005)

DISTRIBUTION

Local Market

- Distribution by -
 - lorry, van and mortar bike**
 - Bicycle, vendors**
- Low Storage Facilities
- Only **47** Ice Plants



Export Sector

About 45 Private Exporters & EDB



SRI LANKA
EXPORT DEVELOPMENT
BOARD

CONSUMERS

- Contribution of fish to food basket **6.6%**
- Spend **Rs 245/=** per Family to purchase fish per month (2005)
- Converted many to poultry meat due to price increment

2 Categories

Upper & upper middle class-

- **Seer, Balaya, Kelawalla, Thalapath**

Lower middle and working class

- **Salaya, Hurulla, Indian Makeral**



Results and Discussion cont.

2005 -2015 Market Landscape

PRODUCTION

Production of 2015
- 452890Mt

Sub Sectors

Deep Sea -183,870Mt	Costal -269,020Mt
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Fullfill 53% of Domestic Protein Demand (2015)

Highest production in
- Galle, Jaffna

Major Species
- Shore & Balaya



Value Added Production in 2012

- Canned Fish
- Fish Meal

Technology

- Fish Aggregating Divices (FAD)
- Well Equiped Multiday Crafts
- Vessel Monitoring System(VMS)
- Tuna Fishing Grounds

Forecasting



MARKET PLACE

Local Market

Retails -

- CFC Retails - 147
- Laksathosa
- Co-opcity
- Fish mela
- CFC Moblie Fish Outlets
- Private Regional Retails
- Private Supper Markets

Whole Sales -

- Central Fish Market Complex Paliyagoda
- Modern Fish Market in Jaffna (2014)
- Regional Whole Sale Markets

International Market

- Europe
- Amarica
- Asia
- Canada
- Switzerland

KEELLS SUPER



MARKET TREND

Local Market

90% Handle By Private Sector
- 10% By CFC

- Export Sector

- Increment in international market share(2015)
- Rapid Increment in Tuna Exports
- Tuna, Fresh Chilled/Frozen Form Food fish

- New Trends (Women Involvements)

Higher educated women engaged in administration level (42.8% MFARD), scientists(33.3% NARA) and researchers(40% UR, 44% OUSL)

- New Trends

- E-marketing
- Online shopping

KEELLS SUPER

Alibaba.com



DISTRIBUTION

Local Market

Assembler > Commission Agent > Retailer

- Island wide distribution by lorry, van and mortar, bike vendors
- Establishment of ice plants increased storage and distribution facilities



Export Sector

Agent > Processor > Exporter (more than 75)



- Ocean Fish
- Ceylon Sea Harvest
- Ceylon Fisheries

CONSUMERS

- Per capita consumption 44.6g/day
- Contribution of fish to food basket 9.2%
- Increase the demand for health concerns (high protein)
- More concern about Quality and Standards

2 Categories

Upper & upper middle class -
- Seer, Balaya, Kelawalla, Thalapath

Lower middle and working class
- Salaya, Hurulla

Hotels and Caters purchasing mass quantity



Conclusions

- In market mix product was changed whole fresh form to ready to cook & eat type and earlier mainly men were engaged with fish landing and processing activities
- But today females are playing an important role in processing plants & cottage industries and their roles were recognized as factory worker, quality assurance officers, Scientists, R&D officers and product development
- And also with these changes qualified females engaged with quality control, branding and administration sections



Conclusions *cont.*

- Market place was changed from landing sites, local markets and road side selling to super markets and e-market with different pricing strategies
- All these changes of place, promotion, physical evidence and process facilitate to involve more female for marketing and promotion while male leads on role in production, distribution & exporting
- Gendered changes in value chain through the market mix variables will support the decision making and planning of future fish markets and empower women and to find out more avenues



Future Research Avenues

- Investigate the gendered role in fishery value chains and measure the gender sensitivity in value chains
- Measure the gender share in consumer spending



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Thank You

