Quality of Work Life of Fish Processing Women Workers in Tuticorin District

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Abstract

This study attempts to evaluate the quality of work life of women in the fish processing sector in Tuticorin district of Tamilnadu.The data relate to the month of September 2015. Percentage analysis, averages, standard deviation, multiple linear regression co-efficient and probability analysis were used. The study revealed that 6.67% of the respondents are earning Rs.3000-4000 monthly, 53.33% of the respondents are earning Rs.4000-5000 monthly, and the others 10% of the respondents are earning Rs.5000-6000 monthly. The average monthly income of the fish processing female workers family is Rs.3800.33. The women employed in the processing plants experienced certain job-related health ailments. The long hours of work (36.66%), constant exposure to cold water and chlorine resulted in muscle cramps (15%), skin irritation, eczema (30%), and respiratory illnesses (6.67%). Women, who form the dominant labour pool of this industry, are exploited by the industry and the contractors (11.67%)are the major problems. The study shows that independent variables contribute about 62.1 percent of the variation in the quality of work life on income by the selected sample respondents and this is statistically significant at 1% level. The result shows that there is fair relationship between quality of work life and income. Thus increase in quality of work life automatically increases income.The results of the study show that many of the fish processing centres in Tuticorin district are functioning at their full potential. Hence the study indicated that increase in quality of work life results in increase in income. The study recommended that promotion policies can be improved by giving grade for designation according to the experience of the employees. It is further recommended that the trade unions should consider the problems of the employees and should protect the employee's interests on time. Women should be stimulated to achieve technical competence and technical courage in the study area.

Keywords: Fish Processing; Seafood Industry; Perishable; Global Market; Quality of Work Life; Empowerment.

Introduction

Globalisation has brought mixed socio-economic outcomes for men and women involved in the seafood industry. If some people benefitted from new emerging work and business opportunities, for various reasons women tend to win less than men, and sometimes tend to even be left behind. On-going global changes are drastically altering the sharing of human, financial and natural resources on a worldwide scale, with a disproportionate effect on women. Research carried out on this topic indicates that women in coastal areas depending on seafood as a source of revenue or a source of food are particularly affected by these changes.

Fish is a highly perishable commodity. In India with its tropical and subtropical climate, the problem of decomposition process become more severe as heat and moisture promote decomposition. Microbes of water and air attack the fish flesh slowly at first and more rapidly later. Therefore, fish processing technologies are used for preservation of the fish and its products. The products include dried, salted, smoked and boiled fish, fish paste and a variety of canned foods in addition to frozen products. Thus,

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processing industry contributes raw materials for a broad spectrum of other industries. According to Robbins, "Quality of Work Life" is defined as, "A process by which an organization responds to employee needs by developing mechanisms to allow them to share fully in making the decisions that design their lives at work". This study attempts to evaluate the quality of work life of women in the fish processing sector in Tuticorin district of Tamilnadu.

Fish Production in India
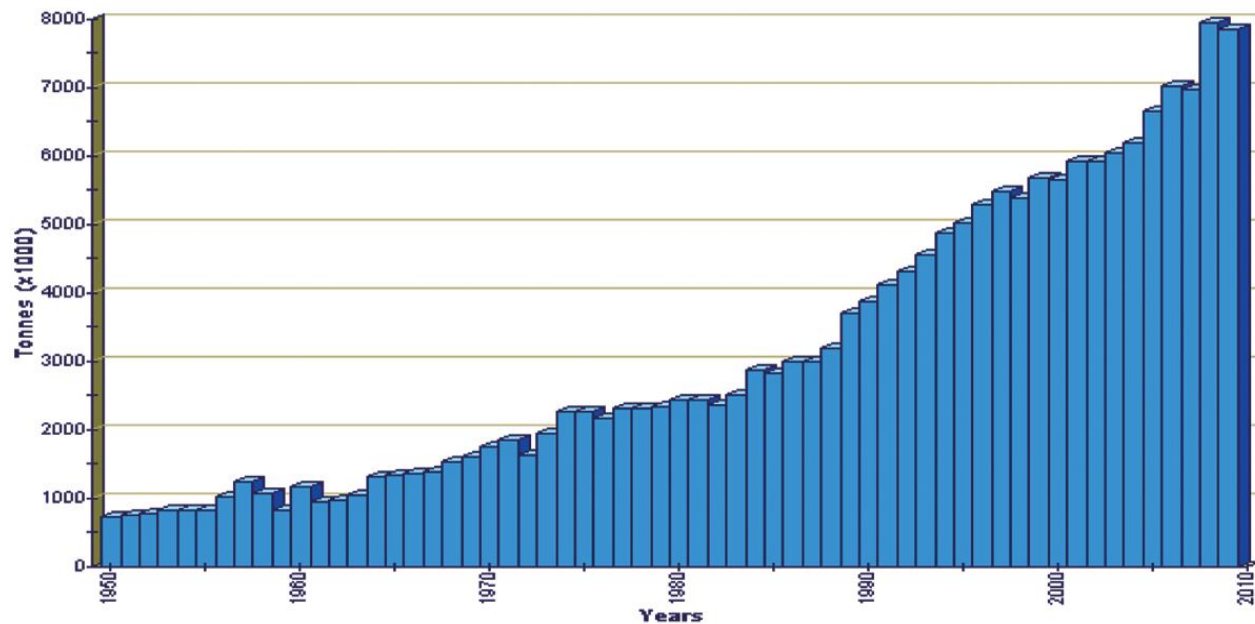
The importance of fish as food has been understood by human being since ancient times. At present, it has become an export-oriented industry contributing to the national economy. Fishing industry not only provides proteinaceous food for millions of people but also employs millions of people throughout the world. Many of them work in ocean-going fishing boats, coastal crafts and small boats. A large number of people work in aquaculture farms also. Other areas of the fishing industry include the processing, packing and distribution of fish products. Besides, a large number of people are also engaged in boat building and fabrication of gears utilised for fishing.

Fig. 1: Fish production in India (1950-2010)

Global Trends & Forecasts of Seafood processing

Fish, mollusks and crustaceans are the major types of seafood. Frozen products, dried products, smoked, canned and surimi, from the chief product types of the processed seafood. In terms of geography, the report is segmented into North America, Asia-Pacific, Europe, and Rest of the World (ROW). With the rising keenness for value-added seafood products, the market is likely to observe significant growth in the future.

Seafood processing equipment forms an essential segment of the global market as it assists in the production of quality processed seafood products of improved taste and longer shelf-life. Proper practice of the seafood processing equipment is used to deliver the most favourable taste, colour, and it also helps in increasing the shelf life of the products. Due to the advancements in the technology and innovation, the seafood processing equipment market is set to exhibit rapid gains in the near future.

The companies that enjoy considerable market share for processed seafood are Thai Union Frozen Products (Thailand), Marine Harvest ASA (Norway), GrupoPescanova (Spain), and others. The seafood processing equipment companies that have major market shares are Marel (Iceland), GEA (Germany), Manitowoc Company, Inc. (U.S.), and others. The existing dominant players are leveraging their innovative capabilities and customer relations to increase acceptance by major industry players.

The figure above shows the growth trend of the seafood type market value from 2013 to 2018. The market of seafood type is projected to grow at a CAGR of 4.1% from 2013 to 2018. The market for processed seafood was estimated to be worth around $165,592.1 million in 2012 and is expected to reach $211,210.7 million by 2018, growing at a CAGR of 4.1% from 2013 to 2018. The seafood processing equipment
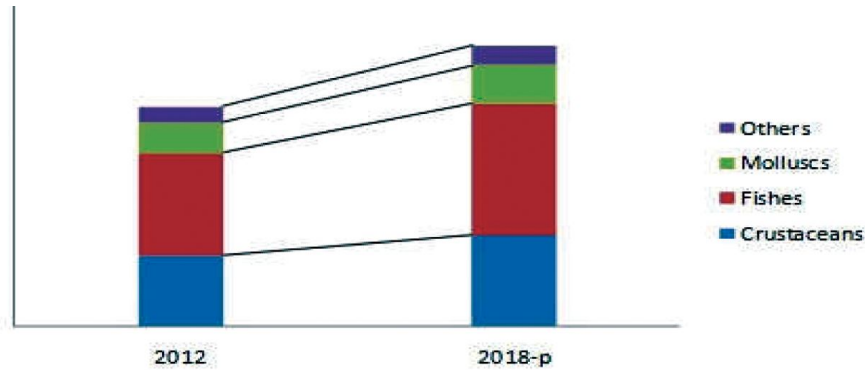
Fig. 2: Processed Seafood Market, by Seafood Type, 2012 Vs 2018 ($Million)
Source: Markets and Markets Analysis, 2015
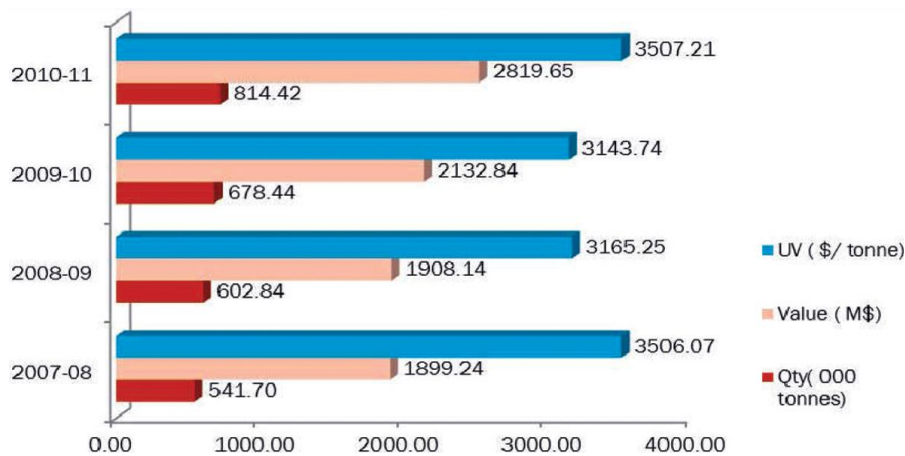
Fig. 3: Performance of the seafood exports during 2007-2011

market was $1,169.2 million in 2012 and is expected to reach 1,469.5 million by 2018, growing at a CAGR of 3.8% from 2013 to 2018.

In India, 90% of workers employed in agriculture and allied sector are women [1]. The pre-processing sector is no different as women form the dominant workforce engaged in tasks such as sorting, grading, peeling, cutting, slicing and washing. More than 90% of the workforce in prawn pre-processing centres and 70% in processing of other fishery products are constituted by women [2]. Even then the wellbeing of fisherwomen measured on the basis of capabilities like morbidity, longevity, nutrition and education has been found to be low [3]. The socioeconomic condition of fishing community largely depends on the availability of fishery resources and the women play a very important role in supporting the family [4].

Objectives

The study was conducted with the following specific objectives

1. To analyse the socio-economic condition of the

women workers employed in the fish processing sector.

2. To find out the major problems faced by fish processing women workers.

3. To investigate the quality of work life of fish processing women workers

Methodology

The study was mainly carried out in the approved fish processing units located at Tuticorin district. Tuticorin region lodge a total of 14 approved fish processing industries which provide employment to about 4302 workers (men and women) in various aspects of processing, viz., sorting, grading, peeling, cutting, slicing, washing, freezing and packing. By using chit method 3 fish processing industries was selected for the study. The study utilises both primary and secondary data. Secondary data and information are collected from MSME- (Micro Small & Medium Enterprises) Development Institute, Thoothukudi, District Industries Centre Thoothukudi, books,

journals and websites. The data relate to the month of September 2015. Percentage analysis, averages, standard deviation, multiple linear regression co-efficient and probability analysis were used.

Analysis and Interpretation

From among 540 women workers employed in 3 fish processing industries, 60 women (approximately 11% of the strength) were selected at random for personal interview. The required information was obtained from the respondents using well-structured questionnaires prepared independently for workers and owners.

A total of 60 respondents were surveyed. From the table, it is revealed that the percentage of 40-50 respondents is more i.e., 28.33% as per the survey 40-50 years age group involvements is higher than that of old and young group in the study area.

Table 1: Age Wise classification of the Respondents

Age (in years)	No. of Respondents	Percentage
20-30	16	26.67
30-40	9	15
40-50	17	28.33
50-60	10	16.67
60-70	8	13.33
Total	60	100

Source: Primary Data

Table 2: Religion Followed By the Respondents

Religion	No. of Respondents	Percentage
Christians	8	13.33
Hindus	52	86.67
Total	60	100

Source: Primary Data

Table 3: Community wise Classification

Category	No. of Respondents	Percentage
SC	51	85
BC	3	5
MBC	6	10
Total	60	100

Source: Primary Data

Table 4: Marital Status of the Respondents

Marital Status	No. of Respondents	Percentage
Married	48	80
Unmarried	12	20
Total	60	100.0

Source: Primary Data

Table 5: Educational Qualification of the Respondents

Qualification	No. of Respondents	Percentage
Illiterate	16	26.67
Primary	13	21.67
High school	23	38.33
Hr. Sec	5	8.33
Graduate	3	5
Total	60	100

Source: Primary Data

Table 6: The Number of Respondents and Their Family Size

Size	No. Of Respondents	Percentage
1-3	35	58.33
3-6	20	33.33
6-9	4	6.67
More Than 9	1	1.67
Total	60	100.0

Source: Primary Data

Table 7: Family Type of the Respondents

Family type	No. of Respondents	Percentage
Nuclear Family	55	91.67
Joint family	5	8.33
Total	60	100.0

Source: Primary Data

Table 8: Housing of the Respondents

Housing	No. of Respondents	Percentage
Own	57	95
Rent	3	5
Total	60	100.0

Source: Primary Data

Table 9: Types of Work

Types of work	No. of Respondents	Percentage
Cleaning	30	50
Setting and canning	12	20
Grading	5	8.33
Peeling and cutting	6	10
Freezing	7	11.67
Total	60	100.0

Source: Primary Data

Table 10: Possession of Livestock of the Respondents

Livestock	No. of Respondents	Percentage
Goat	15	25
Cow	6	10
Cattle	14	23.33
Poultry	25	41.67
Total	60	100.0

Source: Primary Data

Table 11: Monthly Income of the Respondents

Monthly Income (Rs.)	No. of Respondents	Percentage
1000-2000	6	10
2000-3000	12	20
3000-4000	4	6.67
4000-5000	32	53.33
5000-6000	6	10
Total	60	100.0

Source: Primary Data

Table 12: Monthly Family Expenditure of the Respondents

Monthly Expenditure (Rs.)	No. of Respondents	Percentage
1000-2000	12	20
2000-3000	5	8.33
3000-4000	32	53.33
4000-5000	7	11.67
5000-6000	4	6.67
Total	60	100.0

Source: Primary Data

Table 13: Monthly Saving of the Respondents

Monthly Saving (Rs.)	No. of Respondents	Percentage
1000-2000	7	11.67
2000-3000	23	38.33
3000-4000	6	10
4000-5000	12	20
5000-6000	12	20
Total	60	100.0

Source: Primary Data

Table 14: Reasons to Join Fish Processing Industries

Reasons	No. of Respondents	Percentage
Livelihood	22	36.67
Self-earning & independent	20	33.33
Good life to children	18	30
Total	60	100.0

Source: Primary Data

Table 15: Job Related Problems

Problems	No. of Respondents	Percentage
Long hours of work	22	36.66
Muscle cramps	9	15.0
Skin irritation	18	30.0
Respiratory illnesses	4	6.67
Gender inequalities	7	11.67
Total	60	100

Source: Primary Data

Table 16: Regression Results Testing the Relationship between Quality of Work Life and Income

R Value	R Square Value	F Value	Significance
0.752	0.621	103.78	1% Level

The study showed that majority of them, about 84.67%, was Hindus and about 13.33% were Christians. Generally, the study area is dominated by Hindus.

The table reveals that the majority of the respondents belong to scheduled caste and their percentage is 85%.

The table reveals that out of 60 sample respondents, about 80% were married and 20% were unmarried.

Education makes a difference in articulation of opinion. About 21.67% of the respondent had primary education,about 28.33% had high school education, about 8.33% possessed higher secondary level education and only about 5% had pursued degrees. Further,26.67% remained illiterate.

The majority of the respondents i.e., 58.33 percentage of families is having more than 1-3 sizes ranging from members.

This table exhibits that, 91.67 percent of the respondents belonging to the nuclear family. This clearly indicates the declining of the joint family system.

From the table, it is revealed that almost all the sample respondents have own houses (95%).

It has been observed that the dominant fish processing workers relate to out of 60 workers majority (50 percent) of them belong to cleaning. It is followed by setting and canning (20 percent), grading (8.33 percent), peeling and cutting (10 percent) and freezing (11.67 percent) respectively in the study area.

Livestock maintenance is an additional source of income. About 25% of the sample farmers had goat, about 41.67% of them maintained poultry and about 23.33% of them had cattle.

The study revealed that 10% of the respondents are earning an income up to Rs.2000, 20% of the respondents are earning Rs.2000-3000 monthly, 6.67% of the respondents are earning Rs.3000-4000 monthly, 53.33% of the respondents are earning Rs.4000-5000 monthly, and the others 10% of the respondents are earning Rs.5000-6000 monthly. The average monthly income of the fish processing female workers family is Rs.3800.33.

It is clear from the above table that 20% of the respondent's expenditure is up to Rs.2000, 8.33% of the respondent's expenditure is Rs.2000-3000 monthly, 53.33% of the respondent's expenditure is 3000-4000 monthly, 11.67% respondent's expenditure are Rs. 4000-5000 monthly and the others 6.67% of the respondents expenditure are Rs.5000-6000 monthly. The average monthly expenditure of the fish processing female workers family is Rs. 3200.66.

It is clear from the above table that 11.67% of the respondents are saving up to Rs.2000, 38.33% of the respondents are saving Rs.2000-3000 monthly,10% of the respondents are saving 3000-4000 monthly, 20% are saving Rs. 4000-5000 monthly and the others 20% of the respondents are saving Rs.5000-6000 monthly. The average monthly saving of the fish processing female workers family is Rs. 3500.50.

The study reveals that 36.67 and 30 percent of them stated that they join fish processing industries for their livelihood and to provide good life for their children respectively. The remaining 33.33 percent of the respondents reported self-earning & independent.

The women employed in the processing plants experienced certain job-related health ailments. The long hours of work (36.66%), constant exposure to

cold water and chlorine resulted in muscle cramps (15%), skin irritation, eczema(30%), and respiratory illnesses(6.67%). Women, who form the dominant labour pool of this industry, are exploited by the industry and the contractors (11.67%)are the major problems.

The table shows the responses towards various parameters regarding quality of work life. The respondents were asked to rate various parameters like relationship with co-worker, adequate freedom in executing works, workload, leave facilities, training programs, promotion policies, job security, occupational stress, career growth, respect at workplace and opportunities for utilizing skills and abilities etc. on five point Likert scales. The multiple linear regression co-efficient is found to be statistically good fit as R- Square is 0.621. The table shows that independent variables contribute about 62.1 percent of the variation in the quality of work life on income by the selected sample respondents and this is statistically significant at 1% level. The result shows that there is fair relationship between quality of work life and income. Thus increase in quality of work life automatically increases income.

Conclusion

The results of the study show that many of the fish processing centres in Tuticorin district are functioning at their full potential. Hence the study indicated that increase in quality of work life results in increase in income. The study recommended that promotion policies can be improved by giving grade for designation according to the experience of the employees. The study revealed that while the processing units are contributing substantially to the employment of women the extent to which they are contributing to their empowerment, and hence the emancipation of women, is debatable. Arranging meditation classes and entertainment programmes for the employees can minimize occupational stress. It is further recommended that the trade unions should consider the problems of the employees and should protect the employee's interests on time. Women should be stimulated to achieve technical competence and technical courage in the study area.

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