CHAPTER - I

INTRODUCTON AND DESIGN OF THE STUDY

INTRODUCTION

A great majority of people in the developing nations are below poverty line. They are deprived of access to the basic needs of life such as health, education, housing, food, security, employment, justice and equality. Issues of sustainable livelihood and social and political participation of the vulnerable groups exist as major problems in the developing nations. Governments have failed to guarantee people’s right at the implementation level. People who belong to the vulnerable groups are unable to acquire and use their rights (Chatterjee & Sheoran 2007). Yet, human right applies universally to all.

Vulnerability within the right to health framework means deprivation of certain individuals and groups whose rights have been violated from the exercising agency (Yamin, 2005). Certain groups in the society often encounter discriminatory treatment and need special attention to avoid potential exploitation. This population constitutes what is referred to as Vulnerable Groups. Vulnerable groups are disadvantaged as compared to others, mainly on account of their reduced access to medical services and the underlying determinants of health such as safe and potable drinking water, nutrition, housing, sanitation, etc.

1. Chatterjee Chandrima and Sheoran Gunjan (2007), Vulnerable groups in India, Centre for Enquiry into Health and Allied Themes, Mumbai.
Quality of employment has been one of the main concerns in labour market studies in developing countries. In India, the reported status of a worker as ‘employed’ does not necessarily imply a reasonable level of earnings; nor does it reflect the status of living of workers. This is particularly evident from the fact that while the unemployment rate even by the highest estimate was 8.3%, the percentage of people below the poverty line was as high as 27% in 2014-15. It essentially implies that the problem in India is not only of unemployment but also of low productivity of work in which the poor are engaged. ‘Inclusive growth’ being one of the central concerns of the growth process India is presently following, improving the quality of work and raising the level of living standards of workers occupy the central place in the overall growth process (Annual Report, 2010\textsuperscript{3}). This will definitely open up avenues towards reducing the occupational vulnerability of informal women workers at large.

**Employment in the Informal Sector**

An important aspect of the quality of employment in India is the predominance of the informal sector. The size of the organized sector, characterized by higher earnings and job security is small and accounted for less than 6% of the total employment in 2014-15. Around two-thirds of the total organized sector employment is in the public sector. Over the years, organized sector employment has grown more slowly than the total employment, reflecting the faster growth of employment in the unorganized sector. As a result, there has been increasing informalisation of employment over the years. This informalisation has been more pronounced in the case of female workers. As a whole, about 96% of female

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\textsuperscript{3} Annual report to the people on employment, GOI, Ministry of Labour and Employment, 1\textsuperscript{st} July 2010.
employment is in the unorganized sector as against about 91% of males. In urban areas, the percentage of unorganized sector workers is close to 65-70%. Not all of them are poor, but crude estimates suggest that close to half of this number is in dire need of occupational up-scaling.

A large proportion of the workers engaged in the urban unorganized sector are migrants from rural areas with poor education, training and skill background and are employed in low-paying, semi-skilled or unskilled jobs. The productivity and earning levels in most of the enterprises are low and do not often provide full time work to those engaged in them. For the employees, the working environment is not conducive; working hours are long and most of the conditions of decent employment (e.g. paid leave, pension, bonus, medical support and health insurance, maternity leave benefits, compensation against accident, etc.) are nearly non-existent. The past trends and all the available evidence suggest that the bulk of the growth in employment in future will come from the unorganized sector. It will be an important challenge to ensure that employment in this sector consists of jobs with safer conditions of work, decent and growing earnings and a measure of income and social security. Moreover, increasing the proportion of organized sector employment will be an important task to be accomplished in the near future.

**Categories of Workers in the Informal Sector**

Indian economy has a preponderance of informal and unorganized sector both in terms of number of workers and enterprises. This segment of economy has inbuilt vulnerabilities, and the study of unorganized sector based on reliable data is important for informed decision making and addressing the problems faced (NSC,
The biggest problem with the informal sector in India is that there is no precise information about the total number of workers, and particularly of women engaged in this sector and also their respective ratios in various diversified occupations. The Report of the National Commission for Enterprises in the Unorganized Sector highlights the existence and qualification of unorganized or informal workers, defined as those who do not have employment security, work security and social security. This universe of informal workers now constitutes 92 per cent of the total workforce. Informal wage employment is made up of employees of informal enterprises as well as various types of informal wage workers who work for formal enterprises, households, or who have no fixed employer.

The women workers in the informal sector work as piece rate workers, self-employed workers, paid workers in informal enterprises, unpaid workers in family business, casual workers without fixed employers, and sub-contract workers limited to formal enterprises. Home-based workers and street vendors are two of the largest sub-groups of the informal workforce: home-based workers are numerous but street vendors are the more visible of the two. Taken together, they represent an estimated 10-25 per cent of the non-agricultural workforce in developing countries and over 5 per cent of the total workforce in developed countries.

SOCIO-ECONOMIC CONDITION OF WOMEN WORKERS IN INDIA

In India, women play an important role in each and every family, but in the ancient period women were dependent on men. Historically, women have been discriminated against by men in the male dominated society. Most of the girls were married when they were in their teens. Widow remarriages were considered to be a

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social taboo, education beyond the primary or at the most school level was rare. Girls, especially in rural areas and small towns, were deliberately under-nourished and denied access to the outside world and women were considered to be fit to become housewives but not to work in business establishments. But as we go into the future, discrimination against women will go and they will occupy equal status along with their male counterparts. Today’s girls are better educated, more assertive and bolder than the earlier. Added to this is the women liberation movement to protect and improve the life of women. Employment is considered to be an important indicator of women’s achievement in the economic field. In the services of professional and industrial sector, employment of women has increased rapidly. Work participation rate of females has shown an increasing trend in the unrecognized sector, both in the rural and urban areas. In factories such as fishing industries, coir industries, readymade garments and clock manufacturing, the labour force is mainly of women.

**The Women Workers in Unorganized Sector**

The unorganized sector is characterized by the presence of factors such as long hours of work, wage discrimination between men and women, lack of job security, no minimum wages, lack of minimum facilities at work place, ill-treatment, heavy physical work and sexual exploitation.

Women generally work largely in unorganized sector and they are outside the reach of protective labour laws and trade union organizations. They are not offered fair wages and decent terms of work. They hardly find any opportunity to improve their income because in this sector women work generally as labourers in unskilled occupations, or do traditional work as domestic servants. The process of globalization,
export oriented industrialization and relocation of industries from the developed to developing countries also lead to increase in women workers in unorganized sectors.

The nature of women’s work ranges from wage employment to self-employment, family labour and piece rate work. The prevalence of women workers in the urban unorganized sector is significant in number. They are engaged in activities like domestic work, construction work, small trades like brick-making, coir and basket weaving, household industries, etc. In rural unorganized sectors women are engaged in agricultural activities, animal husbandry, dairy-farms and fisheries.

Most of the domestic workers and construction workers are primarily women who have migrated from rural areas for economic gains. The influx of women workers to the cities for non-farm employment has saturated the existing sectors and is one of the main reasons for their extreme exploitation. Hardships of city life, absence of basic amenities and exploitation of these women by employers have added to their misery.

The condition of women labour in rural areas is also no better. Most of them do not have year round employment. They suffer vital disadvantages compared to men in their search for employment opportunities, lower real wages, increased uncertainties and irregularities of employment. There are few legal provisions to protect their rights. Such working conditions are a hurdle in their overall development leading to underperformance and not allowing them to raise their productive capacity in that very profession.
Women in Fishing Industries in India

India stands third in the world regarding productions of fish, after China with a production of 9.01 mn tones in 2015 (Fishstat, FAO, 2015). The annual per capital consumption of fish in India was estimated at 5.2 kg. in 2015. Fish is especially important for the economically weaker sections of the population, providing a cheap and accessible source of protein and essential micro nutrients. A large section of the population depends on fish resources. (both marine and inland) for their livelihood, employment and income. Currently, 14 mn people are estimated to be employed in the fisheries sector, which constitutes 1.07 per cent of India’s gross domestic product. Fish rendering is a traditional occupation that has been a means of livelihood for thousands in India, with the majority of fish vendors being women. But the assumed the nature of product handled by women fishing renders causes a certain stigma that fishermen themselves do no generally face (Shetty and Sreedhara). Nowadays, there are many fishing industries that are going on at the coastal area of India in to process the fish and export to foreign countries. These industries provide more employment to women since they are highly sincere and patient to do that work. But the women workers in these fishing industries are not properly organized by any trade union, they are subjected to many difficulties in the fishing industries due their weak bargaining power and their unorganized work force nature.

Need for the Study

Women’s employment in unorganized sector is rising due to various reasons. The process of globalization, export oriented industrialization, and relocation of


industries from the developed to developing countries lead to increase in women workers in the unorganized sector. There is a decline in the traditional sector employment such as coir, handloom and other home based small industries for branded products have substituted them. Overall economic pressures also compel households to take recourse to various survival strategies. Here the burden of adjustment process falls disproportionately on the shoulders of women.

Women have therefore been drawn into direct economic role as wage earners in factories, construction sites, homes and even in farms. They are employed as cheap substitute manual labour where the situation is pitted heavily against women workers and in favour of their employers (Kumar and Srivastava, 2002). They work in a situation which is sometimes not bearable but they are forced to do their job due to economic compulsions. Unfortunately they are illiterate and unaware about their rights and are reluctant to protest against the misconduct or prevailing situations at their workplace (Saxena and Srivastava, 2003). The fishing industries are providing more employment to women than man since its needs more workers for the processing of fish. The female workers in this industry are not free from the above said situation. Hence the present study has made an attempt to examine situation and status of women workers in fishing industries.

STATEMENT OF THE PROBLEM

Women workers have been an integral part of the work force working in the fishing industry. Fish processing industries provide a major source of employment


especially to women in rural areas. The number of uneducated women job seekers prefer to work in fishing industries because of its access and the requirement of less technical know how. Here the working conditions and the quality of work life among the women workers are miserable since they are working in an unorganized sector and also possess poor knowledge on the compensation and welfare provisions in other industries.

The working women in fishing industries are suffer by poor safety provisions and poor working environment. The fatigue, malnutrition, stress, separation from families, family problems, poor working conditions and dual role in life lead to so many problems among women workers. It not only affects their productivity but also their family work interface which will result in poor performance at the industries. Even though they are subjected to many problems, they are working there for the welfare of their families.

**REVIEW OF LITERATURE:**

Damodaran and Annamalai (2013)\(^9\) analysed the working conditions of women employees in fishing industry. They find that the women workers are very poor in their work life balance, and it is a major cause for their departure from the industry. The study also revealed that there is no work stress measure at their industry.

Prameala and Sreedharan (2011)\(^10\) found that even though the economic level of the fishing women is increasing, they suffer poor recognition from their

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supervisors, owner, family members and community. These affect the productivity of the women workers.

Kauser et al., (2012)\textsuperscript{11} identified that the women workers in fishing industry lack technical skills and basic understanding of ecological and biological requirements of the fishing industry, and also they are very weak in market information and fisheries management.

Halim and Ahmed (2006)\textsuperscript{12} found that the women in fisheries are poor in their level of involvement and scope for enhancement. The important reasons for those attitudes are their poor interest to continue in the present work, family and social problems.

Sultana et al., (2001)\textsuperscript{13} analyzed the women-lesser experienced fisheries management. They revealed that the women in fishing industries are not aware of the management principles in their work. They are not properly taught and trained in their work. Hence the attrition rate among the women workers is mounting up.

Bhaumik et al., (2010)\textsuperscript{14} revealed the problems of women workers in the fishing industries. These are poor wage, longer working time, poor sanitation, poor leave facilities, higher work load and worse treatment by the supervisors and owners.

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Ahmed and Chowdhury (2007)\(^{15}\) identified the role of tribal women in reservoir fisheries of Bangladesh. They have noted that the involvement and acceptance of the situation are very high among the women employees in the industry.

Nam, et al., (2008)\(^{16}\) identified the problems of women workers in fishing industries. The identified important problems are poor infrastructure, poor wages, poor industrial relation, poor in working environment.

Minghua et al., (2013)\(^{17}\) identified major roles played by women in fishing industries. These are capture fishing, families and communities, trading, processing and management administration. They also identified the main issues and barriers which prevent women from equal treatment and full participation in the industry.

Alison and Webb (2010)\(^{18}\) revealed that the under recognition in many aspects, social inequality, poor treatment and wages reduce the women participation in fishing industry.

Joseph (2008)\(^{19}\) analyzed the role of women in fisheries. The women workers are subjected to with little interest in policy making, poor education, lack of skills and family responsibilities in fishing industries. These affect their confidence and interest in the present job.

Subhashini and Gopal (2013) found that the women workers of an organisation are most satisfied with the work atmosphere and job security measures of the factory and are not much satisfied about the permitted leave that could be availed. They are least satisfied with the salary and health and safety provided by the company.

Indumathi and Kamalraj (2012) analyzed the quality of work life among workers in textile industry in Tirupur district. They identified that the quality of work life is not up to the level of expectation of the workers. The poor quality of work life among the workers affects the productivity of the work.

Jeyarathnam and Malarvizhi (2011) examined the quality of work life among sugar mill employees. They concluded that the basic strategy for improving the quality of work life is to identify employees’ important needs and to satisfy those needs. The study also indicated that dissatisfaction might occur due to lack of recognition, devious work, unhealthy peer relations, poor working conditions, low self esteem, occupational stress, heavy work load, monotony, fatigue, time pressures and job insecurity.

Srinivasan and Illango (2012) found that majority of the women workers are not happy with their work but they continued the work without any other option.

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Their income per year is inadequate in the growing economy. Majority of the workers do not have any saving.

Darshan Singh (2005)\textsuperscript{24} analysed the strategies for empowering workers. He pointed out that consistent earning and good working environment for the workers are the two important strategies for empowering workers.

Anitha and Sritharan (2013)\textsuperscript{25} identified the problems faced by women entrepreneurs. They are financial, social, cultural, psychological and physical related problems. All these problems lead to lack of confidence and competence among the women workers.

Palaniappan \textit{et al.}, (2012)\textsuperscript{26} enumerated the problems of women entrepreneurs in Erode district. They are lack of confidence socio-cultural barriers, market oriented risks, motivational factors and lack of knowledge in business administration, awareness about the financial assistance and training and identification of available resources.

Muhammed \textit{et al.}, (2012)\textsuperscript{27} found that the factors affecting the women workers are family, self and society related factors. Factors like financial, economic, political and environmental and marketing related problems also equally affect the performance of workers.

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Zuhaib (2013)\textsuperscript{28} found that women entrepreneurs are not given the same opportunities as their male counterparts, due to discriminatory socio-cultural norms which perceive them as wives and mothers.

Somashekar and Kumar (2012)\textsuperscript{29} identified the important problems faced by women conductors. They are over workload, dual role, and lack of leave facilities, low salary, odd shift hours and health hazards.

Jen \textit{et al.}, (2012)\textsuperscript{30} studied the quality of work life among the women and men in the information technology industry. The quality of work life among women is far better than among men. The women employees have more organizational involvement than men.

Umamaheswari (2014)\textsuperscript{31} analysed and found that the quality of work life among the handicraft workers have a significant influence on their job satisfaction, work life balance, working pleasure, performance and productivity.

Ali (2013)\textsuperscript{32} revealed that there are low levels of quality of work life among nurses. The most important predictor of QWL was disturbance handling, followed by job pride, job security and job stress. The QWL have strong correlation with the turn over intention among the nurses.

\begin{itemize}
\end{itemize}
Adhikari and Gautam (2010)\textsuperscript{33} found that the feeling of job content, working conditions, fair and adequate compensation, career development opportunities, participation in decision making, occupational health and safety, job security and organized relations improved the industry or the working place.

Kalpana and Kiran (2013)\textsuperscript{34} analysed the problem of women workers in construction industry. These are social harassment, gender bias and wage discrimination. These are making the working environment more difficult and keep the women workers in the same level of skill even after working for a few numbers of years.

Aadya and Kiran (2013)\textsuperscript{35} analyzed the occupational stress of women workers in the unorganized sector. They revealed that the occupational stress is higher among women workers compared to men workers. The important causes are their poor education, poor awareness, lack of technical know how and weaker sex syndrome.

Rai and Sankar (2012)\textsuperscript{36} examined the work place culture and status of women workers. They found that the work place culture is not properly shaped among the workers. They are not sincere and dedicated to their work. Their economic status is very low because of poor wages, irregular employment and dual role in the life and career.

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\end{flushright}
Kamala (2012)\textsuperscript{37} identified that occupational vulnerability is higher among the women workers in the unorganized sector. The important reasons for it are low economic status, low bargaining power, lack of control over earnings, work life imbalance, little access to credit, training and information and lack of assets.

Chatterjee and Sheron (2007)\textsuperscript{38} noticed that vulnerable groups are disadvantaged as compared to others, mainly on account of their reduced access to medical services and the underlying determinants of health such as safe and potable drinking water, nutrition, housing and sanitation.

Chavan (2011)\textsuperscript{39} studied the female beedi workers in Solapur city. He found that there is age discrimination among the employers in providing wages and work in the beedi industry. The standard of living of the female workers is very low. The female workers are always worried about their job security in the industry.

Enamol (2014)\textsuperscript{40} revealed that the social life of female workers in tea industry at Bangladesh is very pathetic and miserable because of the workers having been deprived of education, decent employment and other basic facilities necessary for human life. They are far from the touch of modernization. Male domination, harassment and miserable condition of life are faced by the female workers.


\textsuperscript{38} Chatterjee Chandrina and Sheoran Gunjan (2007), “Vulnerable groups in India”, Centre for enquiry into Health and Allied Themes, Mumbai.


Kumari and Ramanna (2001)\textsuperscript{41} identified that there is a gender inequality in all industries. It affects the production of female workers and increases their occupational stress and turnover intention.

Gaur and Rana (2002)\textsuperscript{42} found that the women enter the market as wage earners but occupy secondary position in the labour force. Their significance is considered marginal. They enter the labour market only when the economic compulsions force them to supplement the meager family earnings.

Singh (2002)\textsuperscript{43} found that lack of awareness and basic education lead to exploitation. The system of recruitment was faculty and the age of the recruitment often violated human rights.

Nazeen (2010)\textsuperscript{44} found the conditions of female workers in garment industry are very frustrating. They are affected by lower wages, unfriendly working environment, health issues, deficit of nutrition, insurance, etc. All these problems affect the performance and productivity of the female workers.

Zafar (2012)\textsuperscript{45} declared that women workers receive wages which are insufficient to meet their expenditure on food, clothing, housing, medicines and education of their wards. They suffer by malnutrition and unhygienic complexities. They have no time or scope for recreation.


Sivanesan (2013)\textsuperscript{46} studied the socio-economic conditions of women workers in cashew industries. They revealed that the majority of the workers are receiving a monthly salary of Rs. 4000 to Rs. 6000. Large portion of the income is spent on food items. They faced the problem of low wages. The women workers are not satisfied with their work and working conditions.

Kamala (2002)\textsuperscript{47} found that female work participation very low in the economic development. He revealed that the contribution of women workers for their family, society and the nation is inevitable to lift the standard of living of their families.

Veena Kumari (2008)\textsuperscript{48} examined the socio-economic status of women workers in India. She revealed that the socio-economic status of women workers is higher in the organized sector, whereas it is very low in the unorganized sector. In the unorganized sector, women workers are vastly exploited by the employers through payment of poor wages and higher work load.

**Research Gap**

Even though, there are many studies related to women workers, their economic status, work life imbalances, quality of work life and job satisfaction, there is no exclusive study on women workers in the fishing industries in Tuticorin district. Hence, the present study has made an attempt to fill up the research gap with the help of the proposed research model.


\textsuperscript{47} Kamala Nath (2002), “Female work participation and economic development”, *Economic and Political Weekly*, 1(21), May 27, pp.1108-1113.

Proposed Research Model

The proposed research model of the study is given below.

Study on Women Workers in Fishing Industries

1. Profile of the workers
2. Quality of work life among the workers
3. Work life imbalances
   - Role Stress
   - Work family conflict
   - Family work conflict
4. Job Satisfaction and its determinants among the workers
5. Problems amounted by the workers
6. Economic status of the workers
7. Association between profile of workers and their quality of work life
8. Association between profile of workers and their view on work life in balances
9. Profile of workers and the level of job satisfaction and its deterants
10. Factors leading to choose the present work
11. Discriminant quality of work life among the less and higher experienced workers
12. Discriminant work life imbalances among the less and higher experienced workers
13. Discriminant determinants of job satisfaction among the less and higher experienced workers
14. Discriminant problems among the less and higher experienced workers
OBJECTIVES OF THE STUDY

Based on the proposed research model, the objectives of the present study are confined to

i) study the profile of the women workers in selected fishing industries;

ii) discuss the economic status of women workers in fishing industries and the factors leading to choose the present work;

iii) show the level of quality of work life among the women workers in the fishing industries;

iv) study the work life imbalances among the women workers in fishing industries;

v) understand the job satisfaction and its determinants among the women workers in the fishing industries;

vi) examine the problems encountered by women workers in the fishing industries; and

vii) propose suggestions to solve the problems and to enrich the economic status of women workers in fishing industries.

HYPOTHESIS OF THE STUDY

Based on the objectives of the study, the hypotheses focussed by the present study are:

1. There is no significant difference between the lesser and higher experienced workers regarding various aspects related to economic status, factors leading
to choose the present work, quality of work life, work life imbalances, job satisfaction and its determinants and problems encountered by women workers.

2. There is no association between the profile of the women workers and their views on factors leading to choose the present job, quality of work life, work life imbalances, job satisfaction and its determinants, and problems encountered by women workers.

**Research Methodology**

Research methodology is a way of systematically and scientifically solving the research problem. It is a blueprint of the way in which the research is going to be conducted. Under it, the researcher acquaints herself with the various steps generally adopted in studying a research problem, along with the underlying logic. It includes research design, sampling framework, sources of data, collection of data, framework of analysis and limitations.

**Research Design of the Study**

A research design is the overall plan or program of research. A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research is conducted constitutes the blueprint for the collection, measurement and analysis of data. The research design of the present study is descriptive in nature.

Since the present study describes and analyses the background of the workers, their economic status, quality of work life, work life imbalances, job satisfaction and
its determinants and the problems encountered by the women workers, it is both
descriptive and analytical in nature. Apart from this, the present study has its own
predetermined objectives and also methodology to fulfill the objectives.

Scope of the Study

The scope of the study is confined to women workers in the fishing industries
in Thoothukudi district, Tamil Nadu. Even though studies on women workers are
many, the scope of this study is limited to the socio-economic background of the
women workers, their working conditions, quality of work life, work life imbalance,
job satisfaction and the problems faced by the women workers in the industries.

Population of the Study

The population of the study is the women workers in the top 10 fishing
industries in Thoothukudi district. The top 10 fishing industries in the Thoothukudi
district were identified with the help of turnover during 2013-14. The number of male
and female workers working in the top 10 industries were collected from the records
of the industries concerned. The details are given in Table 1.1.
TABLE 1.1

Number of Workers in Fish Processing Industries in Tuticorin District

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Company</th>
<th>Male Workers</th>
<th>Female Workers</th>
<th>Total Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amulya Sea Food</td>
<td>276</td>
<td>286</td>
<td>562</td>
</tr>
<tr>
<td>2.</td>
<td>Nians Sea Food</td>
<td>74</td>
<td>52</td>
<td>126</td>
</tr>
<tr>
<td>3.</td>
<td>Handi Water Base</td>
<td>31</td>
<td>85</td>
<td>116</td>
</tr>
<tr>
<td>4.</td>
<td>Philips Sea Food</td>
<td>17</td>
<td>108</td>
<td>125</td>
</tr>
<tr>
<td>5.</td>
<td>Britto Exports</td>
<td>30</td>
<td>66</td>
<td>96</td>
</tr>
<tr>
<td>6.</td>
<td>Nila Sea Food</td>
<td>597</td>
<td>609</td>
<td>1206</td>
</tr>
<tr>
<td>7.</td>
<td>Deva and Co.,</td>
<td>423</td>
<td>786</td>
<td>1209</td>
</tr>
<tr>
<td>8.</td>
<td>Kadal Kanni</td>
<td>324</td>
<td>82</td>
<td>406</td>
</tr>
<tr>
<td>9.</td>
<td>Ashwini Fisheries</td>
<td>297</td>
<td>409</td>
<td>706</td>
</tr>
<tr>
<td>10.</td>
<td>V.V.Marine</td>
<td>99</td>
<td>309</td>
<td>408</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2168</td>
<td>2792</td>
<td>4960</td>
</tr>
</tbody>
</table>


In total, there are 4960 workers working in the top 10 fishing industries in the district, out of which, female workers are 2792. A high number of female workers are noticed in Nila Sea Food and Deva and Co., which constitute 21.81 and 28.15 percent of its total of 27.92 female workers respectively. Less female workers are noticed in Nians Sea Food and Britto Exports which constitutes 1.86 and 2.36 per cent respectively of the total work force.
**Sampling Framework of the Study**

The sampling framework of the study consists of determination of sample size and the distribution of sample size among the population (Sampling Procedure). The sample size of the present study is determined by the given formula:

\[ n = \frac{N}{N e^2 + 1} \]

Whereas \( n \) – sample size

\( N \) – Population

\( e \) – error acceptance

In the present study, \( n = \frac{2792}{2792(.03)^2 + 1} = \frac{2792}{3.5128} = 794.8 = 795 \)

**Sampling Procedure**

The determined sample size of 795 workers is chosen from the population with the help of stratified proportionate random sampling. The strata of the present study are the names of the fishing industries. The sample size was decided on the basis of their female workers in proportion to the total workers. In each industry, the female workers were selected at random basis. The distribution of sample is given in Table 1.2.
### TABLE 1.2

Distribution of Sampled Workers

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Company</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amulya Sea Food</td>
<td>286</td>
<td>81</td>
</tr>
<tr>
<td>2.</td>
<td>Nians Sea Food</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>3.</td>
<td>Handi Water Base</td>
<td>85</td>
<td>24</td>
</tr>
<tr>
<td>4.</td>
<td>Philips Sea Food</td>
<td>108</td>
<td>31</td>
</tr>
<tr>
<td>5.</td>
<td>Britto Experts</td>
<td>66</td>
<td>19</td>
</tr>
<tr>
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<td>Nila Sea Food</td>
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<td>173</td>
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<td>V.V.Marine</td>
<td>309</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2792</td>
<td>795</td>
</tr>
</tbody>
</table>

The higher number of samples of 224 and 173 are distributed in Deva and Co. and Nila Sea Food since their work force is higher. The less number of samples of 15 and 19 are distributed to Nians Sea Food and Britto exports since their respective work force are less.
Primary Classification of Workers

As the years of experience among the workers may provide more knowledge and view on the various aspects related to their work in fishing industries, it is considered as a primary variable for classifying the female workers. The workers with experience of less than 10 years are considered as less experienced (LE), whereas the others are considered as higher experienced (HE). The distribution of workers based on their level of experience is given in Table 1.3.

TABLE 1.3
Experience among the Workers

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Experience</th>
<th>Number of workers</th>
<th>Per cent to the total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Less than 10 years (Lesser Experience)</td>
<td>549</td>
<td>69.06</td>
</tr>
<tr>
<td>2.</td>
<td>Equal or More than 10 years (Higher Experience)</td>
<td>246</td>
<td>30.94</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>795</td>
<td>100.00</td>
</tr>
</tbody>
</table>

A maximum of 69.06 percent of the female workers in the fishing industries are less experienced, whereas the remaining 30.94 percent are more experienced.

COLLECTION OF DATA

The present study is completely based on the primary data. Hence, a special care is taken to design the interview schedule. The schedule is classified into five important parts. The first part includes the profile of the women workers, their economic status and factors leading to choose the present work; the second part
focuses on the quality of work life among the women workers; the third part of the schedule includes the work life imbalances among the women workers; the fourth part includes job satisfaction and its determinants among the women workers and the final part of the schedule discusses the problems encountered by women workers.

The relevant variables in the above said concepts, namely quality of work life, work life imbalance, job satisfaction and its determinants and problems encountered by women workers are drawn from the review of previous researches. A pilot study was conducted among 50 women workers working in five major fishing companies in Thoothukudi. By the result of pre-test, certain modifications, additions, deletions and simplifications were carried out. The final draft of the schedule was prepared to collect the data from the women workers.

FRAMEWORK OF ANALYSIS

In order to analyze the data collected from the customers, the appropriate statistical tools have been selected on the basis of the objectives of the study and the nature of data. The included statistical analyses are given below:

i) Exploratory Factor Analysis

Exploratory factor analysis identifies common dimensions of factors from the observed variables that link together the seemingly unrelated variables and provides insight into the underlying structure of the data. Varimax Rotation is one of the most popular methods used in the study to simplify the factor structure by maximizing the
variance of a column of the pattern matrix. The common factors themselves are expressed as linear combinations of the observed variables (Nalini\textsuperscript{49}, 2006)

Factor Model

Factor Score = \( W_iX_1 + W_2X_2 + \ldots + W_kX_k \)

Where

\begin{align*}
F_i &= \text{Estimate of } i^{th} \text{ factor} \\
W_i &= \text{Weight or factor score coefficient} \\
X_i &= \text{Variables included} \\
K &= \text{Number of variables included}
\end{align*}

In this study, factor analysis has been applied to narrate the variables into the important factors leading to working in the fisheries, quality of work life factors, work life imbalances, determinants of job satisfaction and problems faced by the women workers.

\textbf{ii) Confirmatory Factor Analysis (CFA)}

The confirmatory factor analysis has been used to analyze the reliability and validity of the variables included in each factor. The convergent-validity of the factor is assessed by three measures: item reliability, construct (composite) reliability and average variance extracted (Fornell and Larcker, 1981)\textsuperscript{50}. Items validity is evaluated by the size of the standardized factor loading of the variables on their corresponding


factors. The loading should be at least 0.60 and ideally at 0.7 or above (Chin, 1998)\textsuperscript{51}. Composite reliability is assessed on the basis of internal consistency. It is similar to Cronbach alpha. The minimum acceptable level of composite reliability is 0.5 (Gerbing and Anderson, 1980)\textsuperscript{52}. The convergent validity is assessed with the help of AVE which is at least 0.50 (Fornell and Lancher, 1981) and the significance of ‘t’ statistics of the standardized factor loading of the variables in each construct.

In the present study, the CFA has been used to analyze the validity and reliability of variables included in finance, family, personality and industry.

\textbf{iii) Two Group Discriminant Analysis}

Discriminant analysis is a technique for analysis of data when the dependent variable is categorical and the independent variables are interval in nature. When the dependent variable has two categories, the technique is known as two-group discriminant analysis. When three or more categories are involved, the technique is referred to as multiple discriminant analysis (Malhotra, 2003)\textsuperscript{53}. The discriminant analysis model involves linear combinations of the following form:

\[ Z = b_0 + b_1X_1 + b_2X_2 + \ldots + b_nX_n \]

Where

\[ Z = \text{Discriminant score} \]

\[ b_n = \text{Discriminant co-efficient on weight} \]


\textsuperscript{53} Malhotra, N.K., (2003), Marketing Research: An Applied Orientation, Pearson Education Private Ltd., India, pp. 559-570.
X = Discriminant variables

$b_o = $ Constant

The Wilk’s Lambda is calculated as a multi variant measure of group difference over discriminating variables. (Shajahan, 2005). The relative discriminating power of the variables is calculated by

$$I_j = K_j(X_{j1}-X_{j2})$$

Where

$I_j = $ The important value of the $j^{th}$ variable

$K_j = $ Unstandardized discriminant co-efficient for the $j^{th}$ variable

$X_{jk} = $ Mean of the $j^{th}$ variable for the $K^{th}$ group

The relative importance of a variable $R_j$ is given by

$$R_j = \frac{I_j}{\sum_{j=1}^{n} I_j}$$

In this study, two group discriminant analyses are used to find out the important discriminant factors leading to work, quality of work life, determinants of job satisfaction, and problems in work among the less and higher experienced women workers.

iv) Reliability Test

The reliability of the variables included in each construct has been tested with the help of Cronbach alpha. The minimum threshold of Cronbach alpha is

0.60 (Nunnally, 1978). In the present study, the Cronbach alpha has been computed to test the reliability of variables in each construct related to quality to worklife, job satisfaction, determinants of job satisfaction, problems faced by women workers and the factors leading to work.

v) One way Analysis of Variance

One way analysis of variance is used for examining the differences in the mean value of the dependent variables associated with the effect of the controlled independent variables, after taking into account the influence of the uncontrolled independent variables. One way analysis of variance involves only one dependent variable or a single factor. The null hypothesis may be tested by the F statistics based on the ratio between these two estimates:

\[
F = \frac{SS_{X} / (c - 1)}{SS_{error} / (N - c - 1)} = \frac{MS_{X}}{MS_{error}}
\]

where \( SS_{X} = \sum_{j=1}^{c} n_j (Y_j - \bar{Y})^2 \)

where \( SS_{error} = \sum_{i=1}^{c} \sum_{j=1}^{n_j} (Y_{ij} - \bar{Y}_j)^2 \)

\( Y_j = \) Individual observation
\( Y_j = \) Mean for category (j)
\( Y = \) Mean over the whole sample, or grand mean
\( Y_{ij} = \) \( i \)th observation in the \( j \)th category
\( C = \) Number of independent variables or groups

---

N = Total sample size (nxc)

The 'F' statistics follows the F distribution, with c-l and N-c degree of freedom.

In this study, the one-way analysis of variance has been administered to find out the association between the profile of women workers and the factors leading to work, quality of work life, determinants of job satisfaction, and problems faced by the women workers.

LIMITATIONS OF THE STUDY

The present study is subjected to the following limitations.

1. Only top 10 fishing industries are selected for the study.

2. Only women workers at the top 10 fishing industries are treated as the population of the study.

3. The collected data from the women workers are out of their memory. Hence, it is subjected to memory bias.

4. The study on women workers is confined to the study on their economic status, quality of life, work life imbalances, job satisfaction and problems.

5. The relevant variables related to the concepts generated for the present study are drawn from the review of previous studies;

6. The descriptive variables are converted into quantitative variables with the help of likert five point scales.
CHAPTERIZATION

The present study is classified into seven important chapters for neat and clear presentation.

Chapter I reveals the introduction, need for the study, statement of the problem, related review of previous studies, research gap, proposed research model, objectives of the study, hypotheses of the study, methodology, limitations and chapterization.

Chapter II includes the profile of the women workers, their economic status, factors leading to choose the present work, association between the profile of the workers and their view on factors and the discriminant factors among the lesser and higher experienced workers.

Chapter III explains, the quality of work life among the women workers, association between the profile of the workers and their level of quality of work life and the discriminant quality of work life among the lesser and higher experienced workers.

Chapter IV discusses the work life imbalances and its components namely role stresses, work family conflict, family work conflict, association between the profile of the workers and their level of imbalances and the discriminant work life imbalances among the lesser and higher experienced workers.

Chapter V analyses of the level of satisfaction and its various determinants, the association between the profile of workers and their views on various determinants and discriminant determinants of job satisfaction among the less and more experienced workers.
Chapter VI explains the problems encountered by the women workers, the association between the profile of the women workers and their views on various important problems and discriminants among the less and more experienced workers.

Chapter VII summarizes the findings of the study and offers conclusions, policy implications and scope for future research.