Chapter 8
SUMMARY OF FINDINGS AND CONCLUSIONS

8.1 Introduction

This study is an attempt to deal with various aspects that have a bearing on the health conditions- health status and health care system- particularly one of the vulnerable groups, fisherfolk in Kerala. There are many studies conducted in the Kerala’s fishery sector and they are all focussed on the technological aspect of fishery and its contribution to national income and inflow of foreign currency. Only very few studies have been conducted in the health related matters of the fisherfolk. The findings substantiate that they have poor HSI and recommends the State and Non Governmental Agencies’ interventions to uplift this marginalised group. Thus the so called determinants – household size, education, occupation, income and expenditure pattern, basic amenities, health care facilities and new health care interventions of the State - play a crucial role in the health status of the fisherfolk. This is studied under the categorisation of region, area and religion.

The WHO’s notion of health from an intersectoral context – enabling an individual, community, society and State to lead socially and economically productive life and expanding the human capability to ensure a better health status of the population are taken as theoretical basis of this study. The expanding of human capability is understood as freedom of an individual, community and State to eradicate the unhealthy life situations and give an economic and social foundation for the integral development of the people. This innovative approach in the health scenario will improve the health status which will reflect in infant mortality, maternal mortality, morbidity, mortality, education level, occupation, income, prolonged longevity, favourable sex ratio etc. Hence WHO’s ‘intersectoral and multifactorial approach of health and Amartya Sen’s ‘Human Capability Approach’ are taken as theoretical frame work of this study.
8.2 Summary of major findings

The general objective of the study is to know the health status and health care system among the fisherfolk in Kerala. The very specific objectives of the research were: (1) to examine the demographic, socio-economic profile and health status of the fisherfolk of Kerala in relation to the State; (2) to find out the associations and variations in the health status across regions, areas, religions and various socio-economic factors among the fisherfolk in Kerala; (3) to construct and measure Health Status Index of the fisherfolk and identify its major determinants and quantify the magnitude of each determinant upon the index; (4) to review the various health care systems and services and their utilization among the fisherfolk in Kerala; (5) to examine the role and effectiveness of various health programme interventions among the fisherfolk in Kerala and (6) to evolve an alternative model of health care strategies and interventions for the fisherfolk in Kerala.

The design of the study is both analytical and empirical. The primary data are collected through an interview schedule from the households of the fisherfolk. Focus group discussion was conducted as a case study in one of the CHCs in Trivandrum district. Key informant interview were conducted among the health professionals, social workers, academicians, and other activists. Thus the data collected are both quantitative and qualitative ones.

In order to gather primary data, the researcher selected 540 active marine fisherfolk households from three regions, giving equal representation to both urban and rural areas and to three religions. An interview schedule was prepared, tested through pilot study and data was collected. The unit of analysis was household. The data was processed and analysed by using SPSS and statistical results were generated for analysis. The results are explained in the fifth, sixth and seventh chapters. The summary of the findings are narrated in the sequence of objectives. The hypothesis is framed on the basis of the objective and towards the end of the narration, the hypothesis is tested.

The first objective of the study is ‘to examine the demographic, socio-economic profile and health status of the fisherfolk in Kerala in relation to the State’. The demographic features, education, occupational structure, economic status, status of women and the human development advancements are analysed.
Along with the analysis, statistical tests are conducted to meet the **second objective** of the study that is ‘to find out the variations in health status indicators of the fisherfolk across regions, areas and religions; and to examine their associations with various socio-economic factors. Hence the sample is studied very vividly and the associations and differences are analysed on the basis of region, area, religion, gender and age wherever it is required.

The profiles of the sample population of three regions depict the demographic, educational and occupational conditions of the fisherfolk in Kerala. These three regions are not uniform with regard to their socio-economic, educational and occupational aspects.

The **average household size** of the general population of Kerala is 4.7 persons and of the fisherfolk’ average size of the household is 5, and the present survey reveals slightly high with 5.4 per household. As a whole the household size is larger than the state average and Northern region has the largest household size (6 persons). There are statistically significant differences among regions and religions with the household Size of the fisherfolk in Kerala, but there is no statistical significant difference between the area and household size.

**Sex ratio** is highly favourable for male and it is found irrespective of regions, religions and areas. For every 1000 males, there are only 961 females (CMFRI Census 2005). The primary data shows there are only 954 females for 1000 males.

The **density of population** of fisherfolk (2113) is just fourfold to State average (819). The high-density of population among the fisher folk as that of over-crowding is caused by larger family size. This situation also signifies the immobility of people across regions as they were rooted in their traditional occupation.

The **age composition** reveals the fact that the state’s aged population above 65 years is 11 per cent (Economic Review 2009) and among the fisherfolk it is hardly 5.8 per cent. This would imply the life expectancy of fisherfolk is comparatively lower than the State average.

**Age at marriage** is low compared to State average and early marriages occur among the fisherfolk irrespective regions, areas and religions.
Illiteracy rate is at par with the State average but the higher educational performance is very meager among the fisherfolk. A close observation generally reveals that the educational level of the fisherfolk is not only drastically low, but it is more or less the same pattern in all regions and religions, except the further lower levels in the case of Muslim fisherfolk. The common practice seems to be that the fisherfolk are generally contending with the upper primary schooling and very few complete higher secondary education. The level of higher education (degree, post graduation and professional) is abysmally lower, and it constitutes hardly 10 percent.

It is found there are more dropouts among male (52.5 percent) than female (47.5 percent). The male dropouts are more in the lower levels whereas female dropouts are comparatively higher in the secondary levels of education. There is statistically significant difference between male and female and the levels of dropouts among the fisherfolk. But only an insignificant number is found in the graduate and post graduate levels. While analyzing reasons for either dropout or never went to school of the heads of the household, invariably all regions, areas and religions show that it is due to financial difficulties (85.7 percent).

These findings substantiate the argument that the fishing community in Kerala coast is in the process of catching up with other communities in terms of elementary education, but not in terms of higher education.

The implication of occupational pattern is that the fisher folk in the coast of Kerala still remain as a traditional community engaging in the traditional fishing methods and not even in semi-mechanized ones. The occupational diversification is considered as an indicator of social mobility of people into the mainstream of society and it is hardly visible among the fisherfolk.

Irrespective of three regions and the three religious groups, 25 per cent of the households’ monthly income is below Rs.2500. Adding to this, 84 percent of the fisher folk’s households monthly income is below Rs.5000. This low level of income of the active fishermen tie up the fisherfolks into the vicious circle of poverty. This reflects in their socio economic life and physical environment.
The **income and expenditure** patterns are in two directions. The average per capita total monthly expenditure is Rs.686 and there are significant differences among the regions and religions but not in area. The average of per capita monthly medical expenditure among the fisher folk is Rs.91. Among those who have their monthly income below Rs.2500, 50 percent of them limit their expenditure within the limit but another 46 percent always borrow money from others to meet their monthly expenditure. This is a general trend causing to perpetuate poverty ridden situation among the fisherfolk.

The **liability** of the fisherfolk household is a threat to their future. These liabilities are brought from the private agencies mainly for the purpose of the construction of houses and for the marriage of their children. This would mean that liability is made for non productive investment leading them to a life long indebtedness.

The staple food of fisherfolk is rice and fish in general which shows the poor **nutritional presence** among the fisherfolk. There are no such significant differences found among the regions or areas or religions. The greater majority do not have any social security schemes and their life is just left to chances and fate.

It is very common that most of the fishermen are in the traditional sector and are coolie workers. Moreover they are like bonded labourers though it is prohibited by legislation. Since they do not own any **fishing equipment**, they depend on others where primacy is always given to capital than labour. Though there are cooperative societies for fishermen, the active fisherman are deprived of its service for their development. This again causes private money lenders and other private financing agencies to take advantage of the lifelong indebtedness of the fisher folk.

The average possession of **land holding** of the fishermen is 4.5 cents. There are significant differences among the regions, area and religions. Regarding the **basic amenities** like housing, sanitary facilities, water, energy etc. Fishermen are in a better position and more than 90 per cents have all these basic amenities. But the type and quality of each basic amenity is poor in quality and not durable ones. It is also heart breaking to learn that fisherfolk purchase poor quality of water from private water suppliers especially in the South.
To conclude the above observations and analysis based on the primary survey among the marine fisher folk in Kerala delineate the fact that the fisher folk continue to be at a socially marginal status in terms of education, occupation, assets holding, social security and basic amenities. There are statistically significant differences between the regions and between religions but not that significant difference between areas regarding the above mentioned features. This indicates the universality of backwardness among the fisher folk, with serious implications on the capability of the fisher folk households in preventing disease and sustaining a better health status and health care access in all the regions.

Based on these objectives, the first hypothesis is formulated and tested statistically.

**Hypothesis One:** There are regions, areas and religions wise variations in the socio-economic indicators namely, completed level of education, occupation, monthly income, ownership of fishing equipment among the fisher folk in Kerala.

The chi square test was conducted on each hypothesis and associations have been found as follows:

- Completed level of education and Regions: Significant
- Completed level of education and Areas: Not Significant
- Completed level of education and Religions: Significant
- Occupation and Regions: Significant
- Occupation and Areas: Not Significant
- Occupation and Religions: Significant
- Monthly Income and Regions: Significant
- Monthly Income and Areas: Not Significant
- Monthly Income Religions: Not Significant
- Ownership of fishing equipment and Regions: Significant
- Ownership of fishing of equipment and Areas: Significant
- Ownership of fishing equipment and Religions: Significant
From the analysis of the chi-square tests, it is found that there are regional variations in all the indicators but no variation is found in area wise except ownership of fishing equipment. Religion wise also except monthly income, there are significant variation between religions.

**In order to find out the associations of health status indicators with various socioeconomic factors among the fisherfolk in Kerala,** the following variables like number of birth and death, age at death and causes of death, disability, anaemic persons, certain habits, reproductive health of women in relation to regions, areas and religions wise associations are studied.

The average **number of birth** in the fishermen households are either two or three. This study shows more deliveries took place in urban than rural and more deliveries took place among Muslims than in the other two groups. There is no statistically significant difference between the areas and number of deliveries but there is statistically significant difference among religions and the regions regarding the number of deliveries.

**The number of death** analysis shows that still birth, infant mortality and under 5 years death cases are very lower to Kerala average. More death occurred within the age range of 5 to 70 years (67 percent) and old age death is 27 percent. There are no statistically significant differences between religions and number of deaths in the household of the fishermen. Once we analyse the causes of death on the basis of region, more death cases are due to various reasons which are not known to them. This is more among the households of North (64 percent). 23 percent of deaths in the South are due to heart diseases and 7 percent due to cancer. In North also more deaths cases are due to heart diseases (27 percent) and cancer (5 percent). More cancer caused (8 percent) and respiratory diseases (17 percent) deaths are in Central. The lowest mean age at death, 53 years is in South and North is the highest of 63 years. The average age at death of fishing community is 59 years. The mean age at death of rural is 56 years and urban is 63 years.

Once we analyse **disability** among the fisherfolk, more **visually disabled** persons are found. The disability rate will substantiate the argument that there immunisation programme drop outs among the children and lack nutritional food intake.
More mentally ill people are in the North (15 percent). **Physically disabled** are found more in the North. Chi-square test shows that there is no statistically significant association between regions and physically or mentally disabled. The area wise analysis show that there is no significant difference between the rural and urban. There is also no statistically significant association between religions and physically or mentally disabled.

In the general population **anaemic persons** are reported very low and it is only 3.2 percent. 10.5 percent do not know whether they are anaemic or not. The finding reveals that anaemic condition is not a health concern of the people and they do not make any effort to understand it. This may due to their lack knowledge.

The analysis of certain **habits** that affect health status, the primary data shows that smoking and alcohol consumptions are very common among the fisherfolk. The Muslims are comparatively more in the smoking (79 percent) category than drinking alcohol (24 percent).

The healthy practice of **spacing years** between two deliveries are two. The spacing years between last two deliveries in the study conducted shows that around 20 percent of deliveries are below two years and 45 percent of them have minimum two years. The region wise analysis shows that women of North have given more birth compared to South and Central regions. The religion wise distribution also tells the same story. Muslim women have given more birth than Hindus and Christians.

The state percent of **new born babies’ weight** under 2.8 kg is 16 percent. The present survey shows that there are 50 percent below the standard weight among the fisherfolk. The region wise distribution shows that South (38 percent) is comparatively better than Central (52 percent) and North (59 percent). More than 50 percent of the new born children among Muslim and Christian are under the standard weight of 2.8 kg.

Though the State claims that there is 100 percent **institutional delivery** in Kerala. The study reveals that 19 percent deliveries are still in their houses. Among those who had institutional deliveries, 69 percent are in the government health centres.
The 80 percent of the pregnant women did not get the **ante natal** care from the health worker. The rest of the women were attended by the health worker once or twice. The **natal care** by the health worker is also very meager in number. Hardly 10 percent of the women received the natal care from the health worker. The **post natal** care from the health worker has not reached the women of the fisher folk. Only 41 percent have vaccination card. Among them 78 percent are from northern region. The rural women possess 47 percent.

Though there are country wide campaigns for **vaccination** of under 3 years and under 6 years, 12 percent of the children did not receive vaccination and those who had received it mainly from Anganwadi and government health centers.

The total numbers of **abortions** among the fisherfolk women during the last ten years are only 7.3 percent and out of which 6.3 percent are spontaneous and 1.1 percent is induced abortions. More than 50 percent of abortion occurred in the Northern region, South has 16 percent and Central 31 percent. The rural possesses more number of abortions 60 percent. In the case of religion, Hindu has more number of abortions 36 percent than Christian 35 percent and Muslims 29 percent.

The common **incidence of illness** is identified as fever in the general category and asthma is among the acute and chronic diseases. The incidence of illness identified is more in the Central. North has more number of incidences of psychological disorder.

The above findings reveal that the fisherfolk’s health status indicators are of poor quality in relation to the general population of the State. Statistically significant associations are found within regions and religions in almost all indicators of the health status of the fisherfolk. But these significant associations are not found in most of the cases within the areas- urban and rural.

The researcher formulated the **second hypothesis** based on the above objective and it is statistically tested.

**Hypothesis Two:** There are region, area and religion wise variations in the health status indicators namely, age at marriage, number of birth, number of death, causes of death, disability, household monthly expenditure among the fisher folk in Kerala.
In order to understand the variations in the health status indicators, the researcher conducted chi-square test, ANOVA test and t test according to nature of the indicator variable. The one way ANOVA test is conducted to find out the statistically significant differences between the regions and the religions in relation to age at marriage and of the household monthly expenditure. t test was conducted for area variations. The results of the tests follow:

- Age at marriage and Regions : No Significant difference
- Age at marriage and Religions : Significant difference
- Age at marriage and Areas : No significant difference.

- Household Monthly Expenditure and Regions : Significant difference
- Household Monthly Expenditure and Religions : No Significant difference
- Household Monthly Expenditure and Areas : No Significant difference

The number of birth, number of death and causes of death among the fisherfolk in relation to region, area and religion were tested by applying chi-square and the association results of the tests are given:

- Number of birth and Regions : Significant
- Number of birth and Areas : Not Significant
- Number of birth and Religions : Significant

- Number of death and Regions : Not significant
- Number of death and Areas : Not Significant
- Number of death and Religions : Not Significant

- Causes of death and Regions : Significant
- Causes of death and Areas : Not Significant
- Causes of death and Religions : Not Significant
The **third objective** of the study was to construct and measure household level Health Status Index of the fisherfolk and; identify its major determinants and quantify the magnitude of each determinant upon the index.

In order to measure the health status of the household on common scale an index of health status was constructed and measured for each household. The index was constructed out of sum of scores of mortality, morbidity, disability and presence of nutritional status. The frequency distribution of the households, 73.3 per cent households are having poor health status (minus values). Another 12.6 per cent is in 0 values and better health status is found only among 14 per cent. The health status index has askewed graph where there are lot of minus values. There is region wise and income categories wise significant associations found and no such association exists in the case of urban and rural and of religion.

In the process of identifying the variables which determine the health status, Regression analysis was conducted. Regression analysis result shows that five variables (Household Size, Dependency Proportion, Household Education Index, Per capita Monthly Household Food Expenditure and Utilisation of Health Care Facilities) are having significant influence on the dependent variable, Health Status Index. It has been found that ‘Household Size’ is having the highest level of influence upon the dependent variable. It is to be noted that more than the availability and accessibility of the health care facilities, utilization of health care facilities count more towards the health status of the households. This validates the findings of the primary data that their level of understanding of health is just mere absence of diseases. The WHO’s comprehensive approach of primary health care centres are in the coastal villages but the people are not making use of these health care facilities.

Based on the above objective, the hypothesis is formulated and statistical test is conducted

**Hypothesis Three:** There are regions, areas and religions wise variations in the household level health status index among the fisher folk in Kerala.

The Chi square test was conducted to find out the association between regions, areas and religions and there is significant difference between the regions and household health status index. But there is no statistically significant difference between the areas and of the religions.
with regard to household health status index. Thus religion and area wise hypotheses are rejected.

Continuation of the above analysis, it is needed to identify the determinants that causes such variations and associations with regard to health status index of the household. Hence the fourth hypothesis is framed and statistically tested.

**Hypothesis Four**: ‘The health determinants like household size, sex proportion in the household, dependency proportion in the household, household level of education, household monthly income, household monthly food expenditure, basic amenities, availability of health care facilities and utilisation of health care facilities cause variations in the household level health status index of the fisherfolk’.

The causative factors are analysed by applying Regression Analysis and the influence of each determinant of Health Status Index is stated below:

- Household size : Significant
- Household level of education : Significant
- Per capita Monthly Household Food Expenditure : Significant
- Utilisation of health care : Significant
- Sex Proportion in the Household : Not Significant
- Dependency Proportion in the Household : Not Significant
- Per capita Monthly Household Income : Not Significant
- Basic amenities : Not Significant
- Availability of Health care facilities : Not Significant

The regression analysis substantiate that household size, household monthly food expenditure, completed level of education and utilisation of health care facilities are the statistically significant determinants of the household level health status of the fisherfolk in Kerala.

The **fourth objective** of the study was ‘to review the various health care systems and services; and their utilization among the fisherfolk in Kerala’.
It has been found that among those who became sick and sought for treatment, 91 per cent of them prefer Allopathy and those who prefer Homeopathy are mainly in North 9 percent and in the rural 6 percent. 63 per cent among the sick get treatment as outpatients and they always have preferences towards government health care institutions. Their medical expenditure is also very low whereas larger amount is spent on chronic and acute illness. Once we consider the loss of working days due to illness, there are only 16 percent and majority of them within the range of either one week or between one week to one month. Among those who fall ill, there are more male than female belonging to active fishermen.

The media is the main source of information on health matters especially of lifestyle diseases like AIDS. The health professional’s role is not that significant as source of information. This is due to the fact that they do not reach out to ordinary people. Child rearing knowledge among the fisherfolk is mainly (38 per cent) from local customs and practices. There is no formal mechanism to educate the young women for upbringing their children. The role of health professionals is also very minimal. All most all follow the informal sources of information for upbringing of their children.

Around 86 per cent of the fisherfolk have heard of AIDS and South is low compared to other two regions and rural to Urban. Less Muslims have heard of AIDS compared to Christians and Hindus. This may be due to their limited general exposure.

70 percent of the fisherfolk have heard of herbal medicine but donot use herbal medicine. Only 5 percent uses herbal medicine. This shows that there are informal means of knowing about health aspects, but formal ways are not that effective among the fisherfolk. The region wise distribution shows Northern region 12 percent uses herbal medicines. All religions are equally, 70 percent each exposed to the knowledge of herbal medicine. Regarding the kitchen garden, though only 2 percent have kitchen garden, like herbal medicine, many households have heard of it but are not practicing. This may be due to the fact that they do not have enough place in their house premises. The primary data reveals that the North, urban and Christians use kitchen garden compared to their counterparts as in the case of herbal medicines.

This is a general trend in Kerala preferring allopathy to other systems of medicine. Among the fisher folk, 96 percent households prefer Allopathy to Homeopathy 3 percent and
Ayurveda 0.6 percent. The fishermen households have better preference to homeopathy than Ayurveda.

The preventive aspect of health is given much priority in the health awareness programmes in the state. Formation of health club has becoming very common everywhere in the state through the primary health centres and sub centres. The membership of fisher men household in primary source of data shows that there is only 0.7 percent who has membership in the health club.

It is very important to conduct periodical check up of the children and there are only 6 percent who regularly conduct and 94 percent who do not conduct medical check up of their children. The Southern households do not conduct periodic check up whereas Central and North have comparatively 10 percent and 7 percent respectively to conduct periodic medical check up. The urban households (9 percent) have periodic check up where for rural, it is only 3 percent. Among the religion groups, 8 percent of the Christians households conduct periodic check up and Muslim households are only 3 percent. These figures show that a vast majority do not consider these preventive aspects as a health concern.

The family planning method is becoming very common among the fisherfolk women. There are 42 percent who have undergone female sterilisation and 31.5 percent do not know of the family planning methods. The Central region, 66 percent of women have undergone of female sterilization. The women from North and South regions have poor knowledge of family planning. More women in rural, adapted the family planning methods and 45 percent of Christian women had undergone female sterilisation. Those who do not prefer family methods are due to the reason that they want to have another child. It is interesting to comment that the source of information of family planning for 85 percent of the women is from informal ordinary people than the formal agents. This is would mean that the government machinery is not reaching out to the peripheral reaches of the society.

Regarding the status of women in the fishermen households, women have the opinion that they do not have the freedom to take decisions in the economic, or family related matters or spending money. The decisions are taken either by the husband or sometimes jointly. Husband dominated decisions are found more in the Central and North. Area wise urban takes decision jointly than the rural. Religion wise, among Christians and Hindus joint decision taking is
better whereas husband dominated decision are common among the Muslims. Based on the primary data source, the status of women is comparatively low among women in North, Central, Rural and Muslims.

Though there are health care institutions like any other sectors, fisherfolk have more preference towards Government hospitals. Though the sub centres, primary health centres, community health centres are close to their houses or villages, many prefer government hospitals with all facilities. Like any other sections of population, fishermen communities too look for quality of service and specialisation of medicine. It is found that they have access to affordable health care institutions. Though they have preference to government centres equally they prefer private hospitals too. The health awareness programmes are disseminated through the grass root level centres and they do not make any impact on the life of the people.

From the above analysis, the following hypothesis is framed and statistical test is conducted.

**Hypothesis Five**: ‘There are region, area and religion wise variations in the preference and practice of health care systems among fisherfolk in Kerala’.

The fisherfolk’s preference of the system of medicine, attitude towards family planning methods, herbal medicine practices are tested through applying chi-square test and its associations and differences are found.

There are no statistically significant differences in the system of medicine either between regions or areas or religions among the fisherfolk in Kerala. There is statistically significant difference of the family planning practices between the regions and between the religions. The statistical chi-square test shows that there is statistical significant association that exists between regions in the case of using herbal medicines but not among the areas and between religions.

To meet the **fifth objective** of the study ‘to examine the role and effectiveness of various health programme interventions among the fisherfolk in Kerala’, the researcher conducted Focus Group Discussion and Key Informant Interviews as a case study in one of the CHSs in Trivandrum district, Poonthura.
Though there are no specific health programmes for the fisherfolk other than the usual health interventions of government. It is clearly understood that their level of health awareness is very peripheral and the health interventions are considered as something usual and nothing extra ordinary. They are still in the old definition of WHO that absence of disease is health.

They have heard of NRHM through ASHA workers but they do not know the goal or objectives or content of the programme. They find a lot of infra structural changes and new facilities in the hospitals compared to recent past years. They strongly comment that there are health interventions but not beneficial to their health requirements. They do not experience any patient friendly approach from the medical staff.

ASHA workers conduct meetings and these regular meetings help them to a great extent to know the health awareness activities of the centres. They attend the meetings due to their fair relations with ASHA workers. They do not find anything special with regard to these meetings. The grass root level meetings are there but the CHC level meetings are not familiar to them. They feel that something is happening but they do not know what they really are.

They consider themselves as mere recipients or having the status of a beneficiary of the programmes. The new infra structure facilities provide certain confidence to them to have access to the health centres. They complain that their basic health improving factors like drinking water, sanitation facilities, better housing, life skill education for their children etc are not adequately considered in the new health intervention strategies.

They are not aware of the monitoring mechanism of government in relation to the health programmes even after the implementation of PRIs. The stigma behind all government programmes are very much reflected in the FGD too. Though they are aware of the increasing number of life style diseases, they do not know it is one of the goals and major concern of NRHM to solve in the villages. They opine that there is no systematic attempt to change the life styles of the people.

They propose that the activities must be designed and implemented considering the cultural factors of the fisherfolk and their priorities are to be given due importance. They comment that all basic infra structures like drinking water, sanitation, clean atmosphere are in the CHC premises but still people are left to the same conditions. The project fund is spent by giving
salary and remuneration to the staff. They really question whether the people are enabled to lead a socially and politically productive life enhancing their capability to make choice in their life very particularly of health concern.

The sixth objective of the study was to evolve an alternative model of health care strategies and health interventions for the fisherfolk in Kerala.

From the FGD and Key informant interview, the researcher could propose a package of health interventions for the fisherfolk in Kerala as an alternative to the present systems. This is a package and the different components are:

- A paradigm shift in the very perception of health and health care system for the fisherfolk
- Creating awareness of the motto of health as “Peoples Health in Peoples Hand”.
- Promoting team work of different health professionals of the health care centre
- Programmes for demedicalisation of the concept of disease, health and hospitals
- Evolving a strategic planning for the preventive dimensions of health
- Community participation in health care planning
- Giving due importance of incorporating local specificites in the health interventions
- Preparing health care manual for the fisherfolk pertaining to their culture specificiteis.
- Creating a common platform for various cultural, religious, academic institutions, social workers and other interested groups to plan, implement and monitor the health activities
- Provision of qualitative basic infrastructure development of the coastal villages
- Considering the over all backwardness of the sector and initiating a special package of health schemes for fisherfolk
- Awareness activities to remove stigma behind government hospitals
- Life skill education and job diversification of the young generation
- Enhancing the social mobility of people.
- Promoting higher levels of education to the young generation
- Local level health clubs and health manuals for creating health awareness
8.3 Suggestions

Based on the findings of the study, the researcher would like to make the following suggestions and these suggestions are from the point of view of the areas of social work:

- There must be constant healthy discussions related to the health status and general backwardness of the fisherfolk at different levels- adolescents, adult groups, women, men, religious groups, cultural groups, SHGs, commercial institutions, academic people, politicians, LSGIs etc.

- Those proposals made in the alternative health care strategies and interventions are to be considered as time bound programmes.

- Soft skill development of the personnel in the health care centres starts from the Anganwadi worker to doctors. It is they who sell the ideas of the health care interventions.

- WHO’s intersectoral approach is to be considered in every aspect of the health centres where all sectors are given proportionate importance and putting into practice.

- People must be made to make choices in their life and always feel free to raise questions and jointly searching for meaning of life. Hence it is important to expand their capabilities and enabling to lead productive life.

- Health is to be understood from a human right perspective and a healthy living is to be ensured. Those destructive factors must be identified and protection strategies are to be developed.

- There is department of fisheries in the State but they are interested mainly on fish catch and technology fishery. There is no attempt to conduct studies and research in qualitative aspect of fisherfolks’ life.

- There must be PHC or CHC or health care centre citizen’s charter as it is given in the panchayats which will be of great help to those who seek health care support.

- There must be very unique and specific programmes and centres designed and implemented for the fishing community alone.

- Schools of Social work can initiate students’ extension programmes and field work training in the fishing villages and making available of various opportunities for the fisherfolk.
These are the few suggestions for the better health status of fisherfolk and for effective administration of the health care system among the fisherfolk. The interventions must be always focused more on the people and their life than the technology of fishing.

8.4 Scope for further Research

There is lots scope for further research in the life of fisherfolk. Since health is main concern of any human being, further research will contribute new avenues of health interventions. The following areas are identified as further scope of research:

- Preparing health manual and its feasibility to improve the health status of the marginalised groups.
- Each health indicator shall be studied separately and its cause effect relation shall be established for launching new health programmes.
- The determinants are varying and those variations in relation to regions and religions shall be further studied.
- Since the study area is very vast, each and every district shall be studied separately and more concrete actions may evolve.
- The doctors and nursing staff donot prefer to work among such marginalised groups and the reasons and their preferences shall an area interesting to study. Such study will throw light and bring out the inherent problems will be unveiled.
- The social net working and lobbying among the fisherfolk and other NGOs are of another area of research.
- The social work students shall be motivated to conduct minor research proposals which are related to the fisherfolk.
- The fisherfok’s health status and general populations’ health status comparative study will also throw more light to paln and implement health interventions for the fisherfolk.

Since the fisherfolk and other marginalised groups are of great interest of study, therefore scope for further research is plenty.
8.5 Conclusion

This study is an attempt to understand the health status of the fisherfolk and to find out whether there are regions, areas and religionswise differences among the fisherfolk in Kerala. There were six objectives and based on the analysis of these objectives, five hypotheses were framed and statistical tests were conducted. There is variations between the regions in most of the health indicators. The religion wise analysis also reveals that there are variations between the religions in many of the health indicators. But there is no such area wise variation in many of the health indicators. This would propose that there is no significance in planning and implementing welfare programmes very specific to area. It is important to consider the geographical and cultural specificities in planning of programmes for the fisherfolk.

Regarding causative factors of these health interventions, the determinants were analysed and it is found that the household size is to be minimized; increasing of income to meet the per capita expenditure for food; motivating them to achieve higher levels of education which may help for job diversification and removing the stigma of the people in order to make use of the health care facilities which are available in their locality. There is also no need of starting new health care institutions. These findings are statistically arrived at from the primary data collected from the sample population of fisherfolk in Kerala.

The religious and voluntary organizations are to be supported by the government in their process of catering the health requirements of the people. This will increase the effectiveness and efficiency of the programmes. As Amartya Sen rightly highlighted in his ‘Development as Freedom’, that unless the marginalised and oppressed think of their own destiny and by expanding their capabilities to bargain and negotiate with the general population, they will never break the clutches of oppression. This is an effort and an attempt to understand the variations between regions and religions in many of the health indictors and thereby the disproportionate distribution of resources among the marginalised and vulnerable groups like fisherfolk.