Role of Commission Agents in the Development of Traditional Marine Fisheries of Kerala with Special Reference to Financing

A Thesis submitted to the Cochin University of Science and Technology for the award of Doctor of Philosophy

by

G. Balachandran

under the guidance of
Dr. C.A. Francis

School of Management Studies,
Cochin University of Science and Technology.
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DECLARATION

I declare that the thesis entitled " *Role of Commission Agents in the Development of Traditional Marine Fisheries of Kerala with Special Reference to Financing*" is a record of independent research work carried out by me under the supervision and guidance of Dr. C.A.Francis, Professor, School of Management Studies, Cochin University of Science and Technology, Kochi. This has not been previously submitted for the award of any diploma, degree, associateship or other similar title.

Kochi

June 17, 2002

G.Balachandran

CERTIFICATE

Certified that this thesis entitled " *Role of Commission Agents in the Development of Traditional Marine Fisheries of Kerala with Special Reference to Financing*", submitted to the Cochin University of Science and Technology, Kochi, for the award of Ph.D. Degree, is a record of bonafide research work carried out by Mr. G.Balachandran, Lecturer in Commerce, S.D.College, Alappuzha, under my supervision and guidance. This has not been previously submitted for the award of any degree, diploma, associateship or other similar title to the best of my Knowledge.

Kochi

June 17, 2002

Dr. C.A.Francis

Supervising Guide

Professor

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G.Balachandran

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CHAPTER 1

1.1. Introduction

In Kerala, the marine fisheries sector accounts for about 2 percent of the Gross Domestic Product of the state and offers livelihood to 3 percent of its population. The 560 Kms. stretch of coastal waters of Kerala is one of the richest fishing grounds in Asia. In India, the State is the leading producer of fish. Ever since the initiations of modern technologies in marine capture fisheries, the constituents in the industry are noticeably divided in to two distinctive sectors, viz., traditional and modern. The traditional sector, using country crafts for venturing into sea, wholly belongs to the fishermen community. Entrepreneurs from outside the fishing community mostly control the modern sector, which employs mechanised trawlers and seiners for usurping the richness of the nature's bounty.

Since the inception of planning in India, a number of measures have been taken, for the development of fishing and allied industries, because: (a) this sector is eminently suited to support a large bunch of socially backward and economically weaker sections of the rural community; (b) it offers opportunity to bridge the gap between the availability and supplies of high quality protein rich foods for domestic consumption at reasonable prices; and (c) it has export potential. By setting up special agencies to evolve suitable strategies for development of the sector, the Government has been pumping enough money for its expansion.

Commission agents, in this study, refer to those individuals who function as intermediaries among the fishing units, wholesalers and retailers, in the marketing of fish. It is also of importance that the same intermediaries (commission agents) perform as financiers to all the three constituents of the fish market, viz., fishing units and wholesalers in primary markets and retailers and wholesalers in the secondary market. Thus commission agents are those who neither buy nor sell, but are facilitators and financiers.

The dual role performed by these middlemen, as auctioneer of produce and the financier for development, deserve an elaborate study. In the economy of

India, the traditional market intermediaries such as commission agents occupy a vital position in the marketing of many primary products despite all attempts by the administration to eliminate them. Economists and authorities have been studying their role in rural economy for a long time and the common opinion has been against the 'usurping' tendencies of these middlemen.

In trade and commerce, the significance of intermediaries is very high. They play a creative role by assuring market to the producers and by managing the complexities of marketing like grading, pricing, packing, transporting, storing, managing competition etc. In many sectors they offer finance also, either as advance towards price or in the form of deposits to reserve their right to sell. There are also middlemen who provide technology, equipment, raw materials etc. in addition to funds for working capital. In some cases their dealings may take the form of forward sales. It is also true that some of them exploit this right as usurers and go against the interests of the producers.

In developing nations, this role of intermediaries turn out to be controversial as they assume the role of financiers, creating social and economic evils like bonded labour, zamindari, monopoly, formation of cartels etc. In India, these intermediaries have always been described as social parasites controlling the local power and richness, usurping the benefits all development efforts put in by the Government and associated agencies. In the year 1930, the Banking Inquiry Committee commented on the involvement of market intermediaries as, ".....once the producer is indebted to the middlemen the tendency is that, he is unable independently to market his commodity and the natural results are that, he gets less price and has to pay interest on loans. This cuts his small margin of profit clean".

On a closer examination of the history of rural banking in India, we can identify many sectors in rural economy, where the intermediaries played key roles in development and growth, which were neglected by the organised money market. Traditional marine fisheries sector is a good example of such an area.

1.2. The Research Problem

There is a general tendency to attribute the prevailing backwardness of the traditional marine fishermen of Kerala to the involvement of commission agents. A pilot study conducted by the researcher exposed a different perception. Therefore, this study addresses the following major issues.

1) The role of commission agents in traditional fisheries. (Are they contributors to subsistence and development of this sector or are they the evil force hindering development?)

2) The sponsored indebtedness, if any, and its effect on backwardness or development of the traditional fisheries sector.

3) Other reasons, if any, for the backwardness of the class.

1.3. Objectives

The objectives of this study are the following.

1) To evaluate the role of commission agents in traditional fisheries sector, to bring out a proper delineation of their involvement.

2) To examine the phases and stages of induction of new technologies, new relations and new equipments in production, and the contribution of commission agents in it.

3) To identify the respective share and magnitude of investment in the traditional fisheries sector for modernisation and re-equipping, by organised and unorganised financing agencies.

4) To analyse the composition of the investment structure, for the evaluation of indebtedness and to comprehend its effects.

5) To understand the affiliation and the economic and social status of commission agents in traditional fishing sector.

6) To analyse the process of marketing of fish and to assess the price-spread.

7) To evaluate the success of the programmes implemented by government and other agencies for eliminating market intermediaries.

8) To assess whether the intermediaries are responsible for the poor performance in repayment of loans provided by organised money market and, if so, to suggest remedies.

1.4. Scope.

The study is based mostly on Alappuzha District of Kerala, covering all the 30 marine fishing villages, spread over the three coastal taluks, namely, Karthikappally, Ambalappuzha and Cherthala. The study is confined to an evaluation of the involvement and role of commission agents vis-a-vis the organised sector institutions in traditional marine capture fisheries sector and its impact and implications.

The survey for collection of primary data was conducted during the period from 1997 to 2000

1.5. Significance of the study

The study clearly brings out the role of commission agents in the traditional marine fisheries sector and thereby goes to set at rest the controversy regarding their role.

The findings of the study has important implications for formulation of policies and development strategies related to the traditional marine fisheries sector. The study points out the need for a thorough review and reformulation of the policies and development strategies for efficiently achieving the development potential of the traditional marine fisheries sector and for improving the economic conditions of the fishermen.

1.6. Limitations.

The materials used for analysis are mostly collected from the primary sources. The educational and social backwardness of the respondents was a major constraint in the assimilation process. Due to absence of the habit of maintaining regular and reliable records of operations, some data relating to the financial performance had to be arrived depending on the memory of the respondents.

1.7. Methodology.

This is an exploratory study, largely based on primary data. The Alappuzha district, known for high level of fishing activity, is selected for the detailed investigation. The survey for primary data collection covered all the 30 marine fishing villages of the district. Information was collected from the following data units.

(a) Fishing units- 312, representing 6 different classes of craft gear combinations and abandoned units, equal to 20 percent of the total fishing units in the district.

(b) Commission Agents - 145, representing 20 percent of the membership of their association.

(c) Wholesale merchants, retailers and brokers- 22, 20 percent of the total, selected on convenience basis.

(d) Fish exporters - 15, being 20 percent of the units, selected on convenience basis.

(e) All the Fishermen Welfare and Development Co-operative Societies - (10),

(f) District office of MATSYAFED, the apex organisation of Co-operatives (FDWCS),

(g) All the five coastal Branches of the Alleppey District Co-operative Bank,

(h) All Primary Agricultural and Rural Development Banks - (3), and

(i) The Lead Bank.

For selecting the respondents from the first two sources, mentioned above, multistage stratified random sampling method was adopted. The data were collected through verification of records and interviews conducted with the group leaders and members of the fishing units and commission agents, with the help of schedules. From the other sources information were collected by using structured questionnaires and through discussions with select officials and experts.

Landing centres were selected on the basis of fishing intensity. To have an adequate representation of the universe, the centres were classified into three strata, namely,

1) High intensive fishing centres, having fish landings round the year by all classes of craft gear combinations.

2) Medium intensive fishing centres, having landings by certain class of crafts only round the year.

3) Low intensive fishing centres, which are either seasonal or provide landing for very few crafts.

From the selected centres, samples of fishing units were drawn to represent all classes of crafts. The sample fishing units and commission agents were supplied with diaries for recording the daily operating results in an orderly manner. The figures relating to landings, daily expenses and income were collected from these records. Accordingly, records for the four year period from 1997 to 2000 were collected. The classes of fishing units are:

1) Thangu vala units, (Ring scine crafts)

2) Chooda vala units, (Disco net ring scine crafts)

3) Neettu vala units, (Drift net units)

4) Fibre glass units, (Drift net / hooks and line users)

5) Mini trawlers, and

6) Others (non motorised)

To study the trend of pricing and to understand the marketing practices, the method of concurrent observation was adopted. For understanding the socio-economic features and domestic indebtedness of the fishermen, data were collected through a sample survey conducted at five different villages of the district selected at random.

Secondary data were collected from the publications of RBI, Central and State Governments, CMFRI, MPEDA, other development agencies and published and unpublished documents.

For the purpose of analysis and interpretation of the data, common statistical tools are used, which include, percentages, averages, standard deviation, trend analysis, correlations, tools for drawing inference and diagrammatic presentations. For assessment of financial performance, tools from financial management are also used, which include ratio analysis, break-even analysis etc.

1.8. Structure of the Thesis

This study is presented in eight chapters.

Chapter 1 describes the research problem, objectives, importance and methodology of the study.

Chapter 2 reviews the relevant literature in fisheries development studies, rural banking, rural marketing and rural indebtedness.

The geneses and growth of financing market intermediaries and the role played by them in the rural economy of India is the subject matter of the third chapter.

Chapter 4 presents a picture of the structure of traditional marine fisheries, with particular reference to Kerala.

With the help of primary data, chapter 5 analyses the financial requirements, sources of credit and indebtedness of traditional marine fishing units and examines the role and importance of commission agents in the sector.

Chapter 6 examines the marketing system of the traditional marine fisheries and the role of middlemen in this system. It also explores the marketing channels of the system, price spreads and margins and returns on investment.

Chapter 7 gives the analysis of primary data and highlights the role of the commission agents in traditional marine fisheries.

Chapter 8 presents the summary of findings and conclusions of the study and makes some recommendations.

Chapter 2

REVIEW OF LITERATURE

Rural credit, as a subject in development studies may be as old as the history of Economics. Ever since the specialisation of primary activities became a social order, production and distribution of saleable articles at commercial scale must have been practiced all over the world. The villages being the source of primary products, have to find finance not only for production but also for taking the produce to the nearest towns for sale. Many countries developed their own practice and system of financing primary sectors, which later evolved into a special area of academic literature viz. Rural Banking.

India, had very strong scientific approaches and social institutions in rural banking, but unfortunately the British regime and their economic system undid them all. The rulers of the present India, being admirers of the western ethos, vitiated our own system holding it responsible for any thing that went wrong. After a long colonial rule for about three centuries, the Government of the Independent India inherited an impoverished rural sector struggling under a system of extortionate and exploitative urban oriented credit institutions. Since then, rural credit became the prime topic of all discussions on development and planning. As a result, there are a large number of studies at micro and macro levels, looking into the functioning of the rural credit market in the country

India being a welfare nation, having majority of its population and economic activities spread out in villages, has been trying consistently to solve the problems of rural development, since independence. This research on rural banking, taking the financing function of market intermediaries acting in traditional marine fisheries sector as the particular area for discussion, therefore, has to go through literature belonging to different areas of rural development. In order to bring about economic development of traditional fisheries in India, various agencies and institutions have been evolving and implementing programmes and policies for the last many decades. The present day fisheries sector is the product of the combined efforts of many financial as well as development agencies. This research is, therefore, based on a wide review of literature belonging to studies regarding debt providers in rural banking, rural development, co-operation, fisheries development, and rural marketing.

Studies on banking, credit, cooperation, marketing and development in rural areas were mainly carried out in India by various agencies viz. The Reserve Bank of India, the National Co-operative Union of India, the National Council of Applied Economic Research, the National Commission on Agriculture, and the Planning Commission. Similar studies were also made by international agencies like the World Bank, IMF, UNDP, FAO, etc. Many individual researches and research institutions have also contributed to a comprehensive understanding and analysis of the rural credit market in India. Studies during the first two decades immediately after Independence were mostly sponsored by the government agencies. The major objective was to prepare a reliable estimate on the spread and extent of the rural indebtedness. Later on, after the beginning of the Planning era, the studies took the mode of performance evaluation. Studies conducted after the nationalisation of Commercial Banks were aimed to substantiate social objectives and mass management of rural credit.

2.1. Review of Official Studies and Reports

2.1.1. Concerted effort to make an assessment of the overall credit situation in the rural sector was first made during the 1930's. **The Banking Enquiry Committee (1930)** assessed the short and medium term credit requirements of the rural cultivators in British India. [1] According to the Committee the lower limit of the demand was between Rs. 300 crores and Rs. 400 crores. It was only after Independence that concerted efforts to evaluate the rural credit situation began. In pursuance of its professed welfare policies, the Government of India gave importance to the agricultural and rural sector in its development agenda. In this study credit estimates were made disregarding the contribution of indigenous bankers and money lenders, who were playing key roles in rural finance. It was assumed that rural indebtedness was the main barrier to revitalization of the rural economy.

2.1.2. The RBI All India Debt and Investment Survey (1971-72) analysed the outstanding liabilities of the rural households, based on the purpose for which liabilities had been incurred. Out of the total cash debt of Rs. 3.752 crores outstanding against all rural households, Rs. 1,876 crores representing about one-half, was incurred for production purposes and the rest for other purposes. Debts of less than Rs. 500 formed only 9 % of the total, while those between Rs. 500 and Rs. 1,000 constituted 11 %. Debts exceeding Rs.1000 accounted for 80 % of the total debt; the debts size group between Rs. 2,000 and Rs. 5,000 forming the largest chunk in the total.[2]

2.1.3. The Rural Labour Enquiry Committee, 1974 –75 in its final report, analysed the incidence and extent of indebtedness among rural households. The report pointed out that in most of the States the majority of households were in debt. A comparison between households with cultivated land and those without cultivated land showed that the incidence of indebtedness was higher in all states among households with land, than those without land. At the all-India level the incidence of indebtedness was 71% among households with cultivated land and about 48 % among households without cultivated land. More than 75 % of the agricultural households were in debt in the Union Territory of Pondicherry and the States of Kerala, Rajasthan, Haryana and Tamil Nadu. Compared to the earlier survey of 1964-65, the incidence of indebtedness had increased by about 6% indicating a significant worsening of the situation in several states such as Kerala (22 %), Gujarath (18 %), Tamil Nadu (16 %), Orissa (13 %), Andhra Pradesh (10 %), and Jammu and Kashmir (9 %).

2.1.4. A notable result observed by the **All-India Debt and Investment Survey 1981**[4] was that the indebted households decreased from 43 % in 1971 to 20 % in 1981. The average debt per household increased from Rs.503 to Rs. 661. The available literature on rural credit shows that a large proportion of the growing credit arise from the capital needs, particularly of medium and large amounts, are for acquisition of fixed assets for the introduction of latest technologies. The highest percentage-wise increase is observed in the demand for medium size- medium term loans for production purposes among the medium asset group. These sections of cultivators are the main beneficiaries of institutional credit.

2.1.5. In 1951, an expert committee under the Chairmanship of Sri **Gorwalla** was appointed by the Government of India to plan, regulate and supervise a survey regarding facilities available in rural areas for providing credit and to make necessary recommendations[5] The Committee submitted its report in 1954, which found that there was huge need for and lack of credit in the rural areas. The main findings were

1. In spite of years of its working, the co-operative credit movement played an insignificant role in the field of rural credit.
2. Mostly it was the big cultivator, who benefited from it
3. Lending was still on the basis of security of tangible assets and not on the basis of productive requirements.
4. The interests of trader-cum moneylender were very strong and had derived further strength from the superstructure of urban trade and finance, and
5. The co-operatives at the lower levels are not getting much help from the higher tier of co-operatives or from the state.

Considering the weaknesses the committee recommended for

1. The establishment of an integrated scheme of rural credit,
2. Nationalisation of the Imperial Bank of India.
3. Establishment of National Co-operative and Warehousing Board on all-India level,
4. Establishment of two special funds under the Reserve Bank and a special fund under the Ministry of Food and Agriculture for agricultural finance.
5. Introduction of a system of securing loans, particularly short-term loans on the basis of anticipated crops and not just on the security of land and tangible assets,
6. Need for emphasising the economic feasibility of the co-operatives at the village level, and
7 Formation of regional and state level relief and guarantee funds in order to support in writing off irrecoverable debts arising out of repeated natural calamities over a number of years. The commission considering the problem of rural indebtedness reviewed the show of the whole institutional credit system. Besides a thorough assessment of the role of institutions, many broad guidelines were also recommended for the future. A logical structure, linking up the activities of various units, right from the apex banks down to the smallest agencies at the forefront of lending to the rural sector, was suggested by them.

2.1.6 After the **All-India Rural Credit Survey Committee** tabled its report in 1954, the Reserve Bank of India started significant tryouts in rural credit. Some of the recommendations adopted towards the integrated approach[6] were

1. Ensuring state partnership through contribution to the share capital of co-operative credit institutions,

2. Full dexterity between credit and other economic activities, especially marketing and processing, and

3. Administration through sufficiently trained and competent personal responsible to the needs of the rural people.

While suggesting for the reorganisation Land Development Banks, the Committee recommended the institution of a Central Land Development Bank in every state with a primary Land Development Bank having a condensed service area like a Taluk. The Land Development Banks were also supposed to undertake production oriented credit activity and raise their funds by way of issuing ordinary as well as rural debentures.

2.1.7. Reserve Bank took many strong steps for augmenting rural credit and refinance by conducting a series of surveys since 1957 The first and second surveys made during 1956-57 and 1957-58 were conducted in selected districts of different states. The third survey for the year ending on 30th June 1959 was conducted in five districts. These surveys emphasised on the urgent need for reorientation of the loan procedure and to vest the powers of securing of credit limits to the central financing agencies, and to launch a crop loan system for making the primary credit societies work.

2.1.8. The Committee on Taccavi Loans [7]and Co-operative Credit appointed by the Government of India under the Chairmanship of Sri **B. P. Patel** strongly argued that co-operatives should be the normal channel of agricultural credit and taccavi loans should be confined to provide distress finance.

2.1.9. The Governor of the Reserve Bank appointed **Rural Credit Review Committee** almost a decade after the All India Rural Credit Committee set the strategy on rural credit, in July 1966. [8] In its report presented in July 1969, most notable recommendations were

1. The establishment of the Agricultural Credit Board in the Reserve Bank
2. The formation of small Farmers Development Agency (SFDA) in each of the selected districts and
3. The establishment of a rural Electrification Corporation. A more active role for the Agricultural Refinance and Development Corporation (ARDC) was also directed to ensure timely and adequate flow of credit to agriculture through co-operative and commercial Banks.

2.1.10. In 1969, the All India Rural Credit Review Committee was appointed by the Reserve Bank of India under the Chairmanship of Shri **B. Venkattapaiah** to find out measures to regulate and coordinate the role of different institutions and agencies in field of rural credit. The scheme of social control (1967) was suggested by the Committee, which finally led to the nationalisation of 14 major commercial Banks in July 1969[9]

2.1.11. In 1969 under the Chairmanship of **Nariman** a committee of Bankers was appointed to draw up a programme for ensuring the extension of enough banking facilities in villages[10] The committee submitted its report on 15th November 1969, which envisaged a much more active and positive role to the agencies and to act as catalysts in the process of regional development. Under the recommendations, the Reserve Bank of India formulated the "Lead Bank Scheme", to give concrete and functional shape to the integrated area approach to development. The lead banks being the coordinators of development banking were expected to manage the flow of credit through active participation of Commercial Banks, Co-operatives and Government agencies in providing assistance to the rural sector.

2.1.12. After nationalisation the most significant development in the field of rural credit has been the setting up of Regional Rural Banks. This was the outcome of various successive surveys and reviews made by the RBI. In search of a sturdy policy to reduce the popularity of informal credit agencies and to intensify the institutional coverage of rural credit, these reports emphasised on the need for the development and strengthening of co-operatives as the major instrument for rural development[11]

2.1.13. In 1978, the Reserve Bank of India set up a Committee to Review the Arrangements for Institutional Credit for Agriculture and Rural Development (**CRAFICARD**)[12] The findings of the committee on the rural finance necessities and supply made them recommend the constitution of an apex authority. Consequently National Bank for Agriculture and Rural Development (NABARD) came in to existence in July 1982. According to the Committee appointed by the RBI in 1981 to review institutional credit, the principal reasons for overdue were (a) Lack of link in lending with development programmes. (b) Defective lending policies like untimely loan disbursements, under-financing or over-financing and unrealistic schedule for loan repayment (c) Neglect in providing marketing arrangements and lack of linkage of credit recovery through the sale of produce. (d) Ineffective supervision. (e) Misuse of loans and (f) Lack of responsibility and discipline among farmers in regard to prompt repayment of debts.

2.1.14. The **Dantwala Committee** endorsed the proposition that the weaker sections of the rural community should receive preferential treatment from the credit institutions[13] But, it observed that this purpose would be better served through direct assistance by the institutional agencies and the State Government in the form of intensified extension services for improving the productivity of the weaker sections rather than by the system of differential rates of interest. It drew attention to the administrative problem involved in implementing the policy of Differential Interest Rates (DIR) with the attendant possibility of leakage through binami transactions.

2.1.15. The report of the task force on Multi agency Approach to Agricultural Finance identified five problems[14] Viz.

1. The existence of a number of agencies retailing credit in a common area leading to uncoordinated credit disbursement, resulting in multiple financing, over-financing, under financing, financial indiscipline and diversion of resources.

2. The inability of the banks and credit agencies to formulate and develop meaningful credit programmes on the basis of service area approach,

3. Problems of overlapping and duplication of banking facilities, and consequent wasteful expenditure.

4. Problem of over dues and recovery of credit, with more than one agency having claim on the same income or asset received as security, and

5. Problems arising out of divergent systems, procedures and policies, security norms, varying interest rates etc. The group emphasised on effective co-ordination of all lending activities being an essential factor for the intensification of the institutional credit system.

2.1.16. The Reserve Bank of India constituted a committee in April 1979 under the chairmanship of **K.B. Chore** to review the operation of cash credit system of lending[15] The essence of the findings and the recommendations of the committee pointed out the continuing trend of the banks in channelising funds for the benefit of medium and big producers by way of short term loans and disproportionate allocation to small rural borrowers.

2.1.17. In the light of the new approach to lending following the nationalisation of the 14 major commercial banks in 1969, having the emphasis shifted from security oriented approach to production-related lending, it was considered necessary that banks should keep close touch with the operations of the borrowers, to ensure the proper use of borrowed funds and see that the desired objectives were achieved[16] As the result of the unprecedented inflation in 1973-74 and the resultant imbalance in the demand and supply of bank credit, the RBI felt the need to curb the use of bank credit. Reserve Bank in July 1974 constituted a Study Group, popularly known as **Tandon Committee**, for framing guidelines for commercial banks for follow-up and supervision of bank credit to ensure proper use of funds. The Study Group recommended for obtaining periodical plans of business / production and credit needs from customers and suggested an information system for flow of data from the borrowers to financing banks and from the latter to the Reserve Bank. It also prescribed for inventory norms for different industries and indicated the broad criteria for deviating from such norms, and also evolved criteria for ensuring a satisfactory capital structure and sound financial basis to borrowings. The Study Group also recommended for financing the working capital requirements and reviewed the suitability of the existing system of financing through cash credit / overdraft.

2.1.18. National Credit Council Study Group in its report highlighted the weaknesses of the institutional lending system[17] Analysing the function of bank lending the **NCC Study Group** felt that while theoretically commercial bank lending was for short term purposes, in actual practice it was not so. According to the NCC Study Group Report a large part of bank lending was really long term in character and was repayable on demand only in terms. To the extent that outstanding even in a cash credit account never fell below a certain level during the course of a year, there was an element of what is called a 'hard core' borrowing which was in reality a quasi-permanent lockup of bank funds in the-borrower's business. The NCC Study Group thought that the borrowers should repay this 'hard core' borrowing as early as possible. This recommendation however, remained unimplemented. Presumably, the state of the capital market, available facilities to raise term loans and the earnings of the borrowers were thought to be inadequate to provide funds to repay the large quantum of the hard core'. Most banks in the past generally had a system of supervision and follow-up of the credit they disbursed which was primarily concerned with the safety of the funds lent and keeping the account in order. Competition among banks was not conducive to a bank taking a close look into the affairs of the customer for fear of upsetting and losing him.

2.1.19. The Reserve Bank of India conducted an **All India Rural Debt and Investment Survey 1961-62.** According to the report the percentage of indebted households did not show any appreciable variation in comparison with the base figures available for 1951-52. The debt per household was found to be between Rs. 67 to Rs. 69 for cultivators and Rs. 52 for non-cultivators. The average debt per household registered an increase of nearly 16 % from Rs. 447 in 1951-52 to Rs. 647 in 1961-62. The average loan per cultivator household increased from Rs.

526 in I95I-52 to Rs. 708 in 1961-62 in the case of non-cultivator household the increase was from Rs. 249 to Rs.430 during the period[18]

2.1.20. The Reserve Bank of India, in consultation with the Government of India and World Bank, constituted a review committee on 1st August 1986 with Prof. **A.M.Khursro** as chairman to study the agricultural credit system in India. In their review report the committee reviewed the performance of agricultural credit disbursement during sixth and seventh five year plan. According to the report out of the target of short term lending of Rs. 4000 crores for the year 1984-85, Rs. 3489.9 crores were achieved. In the case of medium and long-term loans the achievement was Rs. 2435.5 crores as against the target of Rs. 1415 crores only. The committee recorded their satisfaction on the performance. The report revealed the comparative position of credit and outstanding loans between Co-operatives and Commercial banks over the period from 1974-75 to 1984-85. In short term loans, the share of co-operatives were 78.61 % in 1974-75 and the balance 21.39 % of Commercial banks and RRBs. During 1980-81 the ratio was 60:40 and by 1984-85 the commercial banks improved their position as much as 43.35 %. In long term loan lending the share of commercial banks recorded a sharp growth in amount as well as share. In 1974-75 the amount was Rs. 30.73 crores accounting to only 20.20 %. In 1980-81 it rose to 54.40 crores (42.18 %) and in 1984-85 Rs. 70.32 (59.76 %)[19]

2.1.21. As a part of the initial financial structural adjustment efforts, a high-level Committee headed by Shri **M. Narasimham** was appointed to consider various aspects of the Indian financial system and its components. The Committee was required to make recommendations basically to boost the efficiency, productivity and profitability of banks and financial institutions. This was to be done by infusing greater competitiveness, changing the organisational, supervising and legislative framework, and improving cost composition, coupled with adequacy of capital structure. The report of the Committee was tabled in the Parliament on the I7th December 1991.[20]

Following are the major recommendations of the Committee relating to five broad areas viz. A. Policy Structure; B. Interest Rates and lending;

C. Accounting, Assets and Loan Recovery; D. Appointments and Recruitment; E. Financial institutions and Capital Markets

2.1.21. According to the report of **Agriculture Credit Review Committee,** the factors for overdue are agro-climatic factors, size of holdings, infrastructure and cropping pattern. Commercial banks accounted for large proportion of overdue from big farmers and cooperative system accounted for the small farmers and landless labourers for the largest part of overdues. Among the defaulters, 54 per cent are willful defaulters, 23 per cent defaulted due to natural calamities, I7 per cent due to low income generation and 6 per cent due to other reasons.[21]

2.1.22. The **All India Debt and Investment Survey 1971-72**[22], which estimated the quantity of aggregate debt of all rural households, indicated that the aggregate debts of the rural households in the county were of the order of Rs. 3648 crores comprising Rs. 3552 crores of debt in cash and Rs. 96 crores in kind, the latter forming 2.1 % of the total. Cultivator households, which formed 72 % of all rural households, accounted for Rs. 3374 crores (or about 88 %). The balance of Rs. 47.1 crores (or 12 %) was owned by non-cultivator households.

2.1.24. The 1981 **Debt and Investment Survey** revealed that the average value of total assets per rural household had increased by more than three folds from Rs. 11,311 in 1971 to Rs. 36,090 in 1981[23] The debt due from non-cultivator households was distributed among (i) agricultural labourers, (Rs.181 crores or 4.7 %), (ii) rural artisans (Rs. 54 crores or 1.4 %) and other non-cultivators (Rs. 239 crores or 6.2 %). The debt as on June 30, 1971 represented a twofold growth from Rs.1956 crores in 1961 to Rs. 3848 crores. The average debt per household was Rs. 503, in contrast with the average assets per household amounting to Rs.11,343 (4.34 %) of assets. The debt-asset ratio in respect to the cultivators declined from 7 % to 4 % over the years uniformly in all the states. The decline in the debt-asset ratio occurred despite growth of debt by 38 %. Growth in debt was neutralised by the simultaneous growth of 141 % in the assets acquired by the cultivators by the end of June 1971. The ratio of debts to assets was higher for the non-cultivator group: 9 % of its assets. Within this category, highest were for agricultural labourers (14 %) followed by artisans (12 %) and other non-cultivators (6 %). Of all the assets of rural households, land constituted the main component.

2.1.25. The All India Debt and Investment Survey studied the sources of credit both institutional and non-institutional for the period during 1961-1981. The study revealed that the non-institutional agencies continue to occupy the dominant position in the supply of rural credit. The debt owned by the non-institutional agencies was 82 % in 1961, 69 % of the total in 1971 and 63 % in 1981[24] The institutional agencies are having a better show only in four states viz. Maharashtra, Gujarath, Kerala and Punjab, where the share of institutional credit range between 44 % and 71 % of the total debt of cultivators. Among the non-institutional lenders, the share of agriculturist moneylenders had declined sharply from 47 % in 1961 to 23.1 % in 1971, the largest single source of rural credit. Professional moneylenders accounted for 14 % of total credit to rural households while the share from landlords rose sharply from 1.1 % in 1961 to 8.6 % in 1971.

Among agricultural labour, institutional credit did not play a significant role; its share being only 4.5 % of the total. Only in three states, the share of institutional credit for agricultural labour exceeded 10 % viz. Assam 18 %, Kerala 13 % and Maharashtra 11 %. Co-operative institutions accounted for two-thirds of the institutional debt in Assam, three-fourths in Maharashtra and one-half in Kerala. The distribution of cash debt of all households according to credit agencies indicated that around 25 % of it was due to commercial and co-operative banks, 7 % to Government agencies and 2 % to insurance and provident fund etc. 15 % of the overall credit came from non-institutional agencies. Traders and landlords accounted for 7 % of the cash debt. Rural households owed 57 % of their cash debt to commercial banks and co-operatives and 13 % to agriculturist moneylenders and landlords.

The study reveals that on 30th June 1971, 46 % of the cultivators, 36 % of agricultural labourers, 30 % of rural artisans, and 32 % of other non-cultivators were in the grip of indebtedness. The Survey studied the outstanding liabilities of the rural households according to the purposes for which they had been incurred. Out of the total cash debt of Rs. 3752 crores outstanding against all rural households, Rs. 1876, representing about one-half, was incurred for production purposes, and the rest for other purposes. Over the period 1962-71, the share of expenditure on production purposes in the total debt of cultivating households went up from 38 % to 50 % recording a net rise of Rs. 824 crores.

2.1.26. The **National Council for Applied Economic Research**, in their report on Credit Requirements for Agriculture, found co-operatives, as 'universally acknowledged as the most desirable type of financing agency'. Next to co-operatives, according to the committee, the Commercial banks also recorded significant progress since nationalisation in 1969[26] They also found the moneylender-trader group as the main source of credit especially for the small farmers, who received 75 % of their requirement from this source. It was also estimated that 66 % of short term loans for cultivation from all sources went to the cultivators of high-yielding variety seeds and new technology.

2.1.27 All India Credit Review Committee Report shows that the repayment performance has been poor and deteriorating in almost all the states in India, except Punjab and Rajasthan[27] At the national level, over dues has been rising steadily from 20.3 % of outstanding loans in 1960-61 to 33.5 % in 1966-67 Though some states showed relatively better performance the deterioration is evident in states such as Kerala and West Bengal. In Kerala the overdue in 1960-61 was 16.6 %, which increased to 32.9 % during 1967-68. One of the most important factors affecting non-repayment is reported to be the inadequacy of supervision due to lack of staff and general inefficiency of administrative arrangements. Adoption of unsound policies, such as over-financing, under-financing and the provision for writing off of credit, are some of the causes identified. Some external factors are crop failure and pressure by government upon the institutions to fulfill the loan targets.

2.1.28. The Reserve Bank of India appointed a study team for analysing the causes for mounting over dues in the co-operatives In its report submitted in 1971[28] The team stated the following causes for over dues (a) Lack of will and discipline among former borrowers, (b) Deficiencies of lending policies. (c) Apathy of the Government to take quick action against the defaulting members, and (d) Attitude and policy of State Governments which discourage repayment of loans in time.

2.1.29. The **Rural Debt and Investment Survey** [29]observed that about 50 percent of the cash debt of cultivator households as on 30th June 1971 was incurred at rates of interest not exceeding 12.1 %. The percentage of borrowing at the rate of interest of 12.1 % was as high as 63 %. The RBI further observed that about 10 % of the debt had no specified rate of interest attached to it. Cultivator households with assets up to Rs. 2,500 (i.e. 38 % of the rural households) accounted for more than 13 % of the debt at high rates of interest exceeding 12.1 %.

2.1.30. National Council for Applied Economic Research in its study conducted in 1974 found that the small farmers were meeting 49 % of their loan requirements from the moneylender- trader group at interest rates ranging from 18 to 24 %. Another 17 % of loans were borrowed at interest rates as high as 80 %. At the same time, interest rates charged by co-operatives, commercial banks and other Government agencies varied according to the size, class of cultivators ranging from 6 % to 10 %.[30]

2.2. Review of Studies in Rural Banking and Indebtedness

2.2.1. Amit Bhaduri, while analysing the various causes for high, rates of interest as put forward by earlier investigations, observed that the determining criteria for credit worthiness of a borrower are different as between the organised and unorganised markets. Credit worthiness depends on the type of collateral viz. unmarketable collateral unacceptable to the organised money markets are accepted in the unorganised money market. Such isolation of the unorganised money market hinges on its differential treatment of collateral securities, which, in turn, provides the essential basis for the formation of usurious interest rates[31]

2.2.2. Arun Kumar Bandopadhyaya write that in traditional sector where the distribution of resources is unequal, one section of the farmers take loans, for consumption purposes from the other section, at high rates of interest. The prevalence of high rates of interest in such societies is mainly due to high-risk premium and administration costs involved, and partly due to monopoly in the credit market. The prevalence of high rates of interest in these underdeveloped areas is also due to use for consumption purposes rendering the demand for such loans highly inelastic. An interesting finding of this study is that the loans contracts which do not explicitly make mention of rates of interest charged do in fact carry, very high implicit rates. Bandopadhyay also points out to the existence of multiple systems of loans that are manifestations of the varying bargaining powers of the lenders and borrowers in the agricultural credit market. A significant observation relates to the fact that when the high rate of interest is decomposed into basic rate, cost of administering loans, risk premium and monopoly profit, the basic rate and monopoly profit are much more important than the risk premium and administrative cost. However, this study does not analyse the available sources of institutional credit. The major emphasis is on non-institutional source of credit since the author apparently tries to make the point that institutional credit is, by and large, not accessible to the small farmer[32]

2.2.3. Atiqur Rahman in his study "Usury Capital and Credit Relations in Bangladesh Agriculture: Some implications for capital formation and capitalist growth"[33] has tried to examine the credit relations prevailing in rural Bangladesh. There the rates of interest charged by moneylenders on credit in money and in kind, were about 100 and 150 % per annum. Marketing intermediaries also charges interest at similar high rates. Rates of interest charged by landlords are between 50 to 100 % per annum. In short, (1) the rates of interest on loans from non-institutional sources are very high, (2) rates of interest charged by landlords are lower than that of professional moneylenders and market intermediaries, and (3) in kind rates are much higher than monetary rates of interest.

2.2.4. Banerjee P.K argued that in developing countries, it is only the Government agencies, that can act as a catalyst for bringing about a fundamental change in the rural debt situation [34]

2.2.5. Bansal and R.S. Narwal's article entitled "Farmers Constraints in Borrowing Farm Credit", discusses the problems faced by the farmers in obtaining credit from financial institutions, particularly from the commercial banks. According to the author, the factors, such as lack of knowledge about banking procedures, illiteracy of the borrowers, non-cooperative attitude of the bank employees and cumbersome procedures of banks etc., prevent farmers to approach commercial banks for obtaining farm credit. The present study has investigated the constraints of farmers in obtaining loans from commercial banks in detail and has suggested a research-based strategy for accelerating; the pace of agricultural finance [35]

2.2.6. Basu S.K., in his study Commercial Banks and Agricultural Credit, gives a critical evaluation of the existing schemes for rural development at the grass root level [36] The author has made an attempt to assess the contribution of commercial banks in the development of agriculture. His enquiry relates to the adequacy of financial facilities offered by the commercial banks and the rules and conditions of advancing money. He agrees that since nationalisation the commercial banks were doing a commendable job in developing agriculture. But, in his opinion there is an urgent need to have a fresh look on the problem to bring about more improvements in the future plans.

2.2.7. Bottomley argues that the high administrative costs are allegedly the cause for high interest rates particularly on loans obtained from private sources[37] He observes that individual farmers with relatively petty needs, on an intermediate reluctance or inability to repay, will go on borrowing small amounts, of which every amount will require time to negotiate and recover. The result is the increase in administration costs on each rupee, which will correspondingly increase the moneylenders' rate of interest on loan. Opportunity cost of the lender's money is one of the main determinants of high costs. Bottomley states that this high cost is due to returns on alternative investments and liquidity preference which have a direct bearing on high administration, risk and monopoly charges within the rural rates of interest as a whole. According to him the pure rate of interest is the opportunity cost of money, which determines the market interest rates in underdeveloped rural areas.

2.2.8. Chandran T. R., Balishter and Rajkumar in their study on Availability and Extent of Utilisation of Credit in Agriculture analysed the extent of utilisation of loans in cash and kind provided by institutional credit agencies[38] According to the study, the proportions credit in cash and kind was 78:22. The misutilisation of credit was more in cash loans. They found loan in kind to be more effective.

2.2.9. Charan D. Wadhwa's work "Rural Bank for Rural Development" attempts to evaluate the role of institutional credit in rural development. He feels that due to reasons like influence of local politics, complicated procedures, unhealthy attitude of banking personnel, corruption etc., and the poor have not been benefited at all. The work stresses upon the point that rural banks must develop simple schemes and co-operative attitude for providing requisite financial help and assistance to the needy rural poor[39]

2.2.10. Choubey B.N.- in his book, Agricultural Banking in India, gives a detailed description of the various institutions that are actively engaged in the task of financing agriculture. After reviewing the role of the institutional credit in agriculture, he observed that despite the complexity of institutions like co-operatives, commercial banks, Regional Rural Banks, Agricultural Refinance Development Corporations, and NABARD etc. the agricultural sector is still suffering for want of adequate funds[40]

2.2.11. Dadhich,C.L observes that higher the amount borrowed, lower was the proportion of diversion of credit[41] The main reasons of diversion were pressing household needs, repayment of old debts, re-lending at higher rates of interest, low level of education, lack of supervision and irrational lending policies.

2.2.12. Dadhich.C.L., in his study on willful default of co-operative credit in Rajasthan has cited five major qualities of that section of the population which indulges in it (a) Those they have large size holdings, (b) Those belonging to higher caste groups, (c) Those having large borrowings from co-operatives, (d) Those having higher levels of education, and (e) Those who are members and ex-members of management committee or their close associates[42]

2.2.13. Ghosh B.K. "Some Reflections on Rural Banking and Agricultural Financing by Commercial Banks". This article contains relevant information about rural banking and agriculture financing by commercial banks after nationalisation. The author has made an attempt to see how the banks make much credit available to agricultural sector during 1969 to 1985[43]

2.2.14. Ghoshal S.N. through his study Agricultural Financing in India, deals with the short-term and medium-term credit needs of the farmers. According to the author, co-operative institutions designed to make available timely and adequate credit to the farmers for agricultural development are not able to provide credit facilities as envisaged. He argues that because of the failure of co-operative credit structure, the responsibility financing the primary sector has to be shifted to commercial banks. The role of indigenous financiers, according to him is anti-development and is to be replaced by organised money market[44]

2.2.15. Guruswami.P. and Balasubramani. P.N. in their study on 'Factors affecting securing and repayment of agricultural credit for Canara bank' observed that the borrowers for purposes other than agriculture diverted about 45 % of the loans. Out of the amount so diverted, nearly 17 % were used for repaying past debts and 28 % for meeting domestic consumer expenditure, ceremonies etc[45]

2.2.16. Horace Belshaw in his study carried out for FAO, "Agricultural Credit in Economically Underdeveloped Countries" argues that the effect of credit for development is decided by the use of it. It is necessary that the amount given should go into reproduction of agricultural capital or towards the production of usable values such as food, clothing, travel, festivals etc. He proposes that in principle there may be objections to grant loans for consumption purposes, but in practice it may not always be easy to ensure that loans for production are so used. A survey conducted by him in Taiwan showed that about 58 % of rural credit given there goes towards working capital, of which about 50 % were diverted for consumption purposes by the borrowers. He states that he had encountered the phenomenon of usury interest as early as 1913 in a study of a village in Lebanon. According to him the predominance of non-institutional lending agencies is the major reason for the existence of higher and more exploitative interest rates in underdeveloped countries. In India, as per his study, loans for consumption purposes formed more than 50 % of the total debt[46]

2.2.17. Kahlon A.S. and Karam Singh through their work, "Managing Agricultural Finance"[47] gives the view that the financial institutions like co-operatives, Region Rural Banks and Commercial Banks etc. has failed to cater the agricultural sector and the farmers are still suffering for want of funds. Taking the shortage of resources for providing agricultural credit, they argue for the need of effective management in credit. The authors recommend for the financing of new technology and improved methods and practices that enhance agricultural production.

2.2.18. Kalyankumar in his study on "Willful Default in Loans of Co-operatives" has examined factors that demarcate the willful defaulter from the non-willful defaulter in the Parbhani district of Maharashtra. According to him the probability of becoming non-willful defaulter was higher in low-income group having low amount of loan, low expenditure on fertilizers, improved seeds, modern technologies and insecticides. The probability to become willful defaulters was higher among high-income group, having majority educated members in the family and high caste[48]

2.2.19. Kaushik Basu attempts to show that high interest rates in underdeveloped rural areas are not due to the conventional hypothesis of lender's risk. They exist mainly due to the fact that most of the loans taken from non-institutional sources are unproductive, and that there exists personalised relation between the borrower and the lender. The rate is always higher for the poor as the majority of the loans are for consumption purposes.[49]

2.2.20. Kewal Kumar in his work Institutional Financing of Indian Agriculture with Special Reference to Commercial Banks have remarked that the development of agriculture is the basis of the rural development.[50] The study includes the problems of agricultural finance. The author has also attempted to assess the importance and impact of the institutional credit on the agricultural produce. He recommends for an integrated credit policy by the institutions supplying agricultural finance, as the provision of agricultural credit in the context of modernisation of agriculture has become a necessity. According to him, the share of institutional credit was 8 % in 1951, 18 % in 1961 and 32 % in 1971. He estimates decline in the share of agricultural moneylenders in rural credit from 48 % in 1961 to 23 % in 1971. The share of landlords went up from 1 % to 8 % during the same period. Kumar estimated total borrowings of Rs. 6.000 crores in 1976, in which, the share of co-operatives and commercial banks was Rs. 2,700 crores, or 45 %. The Governments recorded 7% share. Supplying 52 percent of the rural credit in 1971, according to him, the institutional agencies emerged as the major contributor. Co-operatives held a major share among the institutional agencies in the farm production front. He points out that about half the direct loans, which were due to repayment, was in arrears. According to him the main causes of poor recovery of agricultural loans and the resultant over dues were (a) Natural calamities like flood, draughts, etc. (b) Defective appraisal of loan applications regarding yield, input cost and output price. (c) Unsatisfactory marketing arrangements, resulting in lower price. (d) Unforeseen expenses due to illness and social ceremonies etc. (e) Willful default on the part of certain agriculturists, and (f) Lenient and loose policy of the government due to political pressure.

2.2.21. Kishore, C. Padhey's "Commercial Banks in Development". The authors have presented an outline of the banking system in our country and their role in economic development. They certify that the commercial banks have been successful in playing a pivotal role in improving the socio-economic conditions of rural masses and they dare to call the banks agents for development or social change.[51]

2.2.22. Kodesia.J. through his study on "Agricultural Credit in India" observed that one of the most disquieting features of the co-operative credit structure was the increasing proportion of over dues year by year a large part of which was due to willful defaults[52]

2.2.23. Mahendra D. Desai and Bharat D. Naik, while analysing demand for short-term credit vide their essay 'Prospects of Demand for Short-term Institutional Credit for High Yielding Varieties', found in 1971, at the time when the high-yielding variety programme was being introduced, the demand for credit remained unmet because of the non-availability of credit to small farmers. The institutions then used to select farmer for granting credit in general, from bigger cultivators. In spite of the avowed policy objective of a multi-agency approach for meeting credit requirements of the cultivators, it was the large farmers who in fact constituted the biggest beneficiaries. The evidence was that the commercial banks provided Rs. 210.40 crores by way of short-term and medium-term credit to agriculture of which the bulk went however to the above-average farmers[53]

2.2.24. Mishra M.N. In an article entitled "Rural Banking for the Rural Poor" projects the view that the Regional Rural Banks are established with a view to provide financial help to the rural poor. But the beneficiaries of these banks are mostly the rich farmers and not the small and marginal ones. According to the author this practice is mainly due to the connivance of and corrupt practices indulged in by the bank officials and the influence of local leaders.[54]

2.2.25. Mohan Rao J., in his article 'On interest rates in backward agriculture', explains the determination of interest rates on the basis of collateral valuation. The lender's gain consists of two components: monopoly power and default. Monopoly power in the credit market enables the lender to value collateral below their normal price; in such a situation default means loss to the borrower as the lender can raise interest rates substantially[55]

2.2.26. Murthy K.V. and Vijay Kumar in their article "Small Industries and Rural Development" have made an effort to establish the role of small industries in rural development. The authors hold, if small-scale industries are established in the rural areas, they can generate extra employment opportunities, reduce poverty and dependence of the rural population on agriculture. They can play an important role in improving the overall socio-economic conditions of rural poor[56]

2.2.27. Nagaraja B. through "Financing and Rural Artisans by Commercial Banks: Some Problems and Suggestions" has observed that rural artisans have been an integral and continuing element in India's economic and cultural setup. The importance of this sector is indeed phenomenal from the viewpoint of employment generation, contribution to the national income and foreign exchange earnings. The author feels that unfortunately this sector has completely been ignored by the commercial banks and they prefer to finance agriculture that is not the only way of bringing about rural development in the country. Nagaraja has also pointed out certain difficulties faced by commercial banks in financing rural artisans and suggested remedies to remove them[57]

2.2.28. Naidu L.K. "Bank Finance for Rural Development" (edited). The study certifies that public sector banks have been extending credit facilities to neglected sectors of the rural economy. The finance for agriculture, small business and small-scale industries has been able to eradicate poverty and unemployment from the rural sector.[58]

2.2.29. Naidu. L and Nagraja.B in their article "Financing of Small Scale Industries by Commercial Banks: Some Problems and Suggestions" feel that in an agricultural country like India, where unemployment and underemployment is acute, small scale industrial sector has to play a prominent role. An important feature of small-scale sector is that it helps in diffusing economic power and ensures equal disbursement of wealth-, which is essential to achieve objective of a socialistic society. Authors say that Japan and China have relied heavily on this sector for achieving the objective of economic development. The small-scale industries not only provide employment opportunities but also make a great contribution to the rapid decentralised growth of our economy. Therefore, realising the potential of small-scale industries, institutional credit should be made available to them by the financial institutions like commercial banks. In this article, an effort has also been made to highlight the problems faced by the commercial banks and for their removal the authors at the end of the study have listed some meaningful suggestions also[59]

2.2.30. Narayana Kurup T.V., states that in rural credit the implied rates of interest has many disguised forms, which the borrowers cannot realise. To analyse different rates of interest, the author has studied different sources of supply and the occupational groups involved in loan transactions. He found that the average rate of interest was much higher than indicated by the All India Rural Debt and Investment Survey regarding non-institutional agencies. It was found that the cost of credit was inversely related to the economic status of the borrower and that the effective interest on loans remained concealed[60]

2.2.31. Narayanappa G.L., in his 'Maladies of Rural Artisans A Case Study' has observed that the rural artisans in our country have been suffering from certain socio-economic problems like lack of adequate and timely credit, lack of marketing facilities at the local level, poor infrastructure, unwillingness to adopt new technology, and non-availability of quality raw material, etc. After discussing these problems, the author has suggested some remedial measures to remove these problems.[61]

2.2.32. Naryana G.A. In his work "Problems of Agricultural Loans" has discussed the problems of small and marginal farmers going for bank loans. He underlines non-cooperative attitude of the bank employees as the basic reason followed by complicated and dilatory procedure and their dependence on the Sarpanch and other functionaries for getting loans. At the end, some suggestions have been made to remove these drawbacks.[62]

2.2.33. Nirmal Sanderatne considering the agricultural credit situation in Srilanka says that poor repayment of debts is due to the lack of efficiency in the analysis of the credit worthiness of the borrowers. He observes in his study that co-operatives in Srilanka have virtually become offices for issuing funds, rather than responsible agencies directly concerned with agricultural enterprises, interested in the proper use of funds and their ultimate recovery.[63]

2.2.34. Noor A.B. and Naryana Rao in their article entitled "Agricultural Development Policies: Need for a Fresh Look" highlight the problems faced by the farmers with regard to their credit needs. The study reveals that the credit facilities or incentives for development of agriculture are availed by rich and affluent farmers only. The subsidies and cash incentives are either taken away by feudal landlords or by Government officials. Keeping in view the problems of small and marginal farmers, the author has strongly recommended for restructuring of the agricultural development policies and has also given some suggestions to remove the bottlenecks.[64]

2.2.35. Pal B.K. and K.L. Mukhopadhay vide article "Agricultural Finance in West Bengal" have made a joint effort to assess the credit requirements of the farmers of West Bengal. In their opinion the co-operative banks and other development institutions are catering the credit needs of the farmers, which is still not enough. They recommend for suitable changes abridging the credit gaps present and future. They have a detailed discussion on the non-compatibility of terms and conditions of institutional lending and they suggest that the Reserve Bank of India and other financial institutions should amend their rules and regulations and ensure that the agriculturists are getting the financial assistance easily.[65]

2.2.36. Panda R.K. has studied Agricultural Indebtedness and Industrial Credit and Depicts the measures that have been undertaken by the Government to provide institutional credit to small farmers and small entrepreneurs. The study incorporates a survey on the role of moneylenders in financing small farmers and rural poor.

The study reveals that the small farmers have not yet been benefited by the institutional credit and the money lender continues his usurping in villages. The argument is for developing measures to ensure the effectiveness of the institutional credit.[66]

2.2.37. Pranab Bardhan and Ashok Rudra through their article 'Inter-Linkages of Land, Labour and Credit Relations: An Analysis of Village Survey Data in East India' have tried to examine the terms and conditions of land, labour and credit relations. Their interesting study reveals the part played by professional moneylenders and rich farmers who practiced money lending in West Bengal, Bihar and Eastern U.P. They came across cases of landlords giving consumption loans and advances made to cater the production needs of villagers, both free of interest. The relation for giving such loans free of interest is the result of the practice of rendering of small services to the landlord by the tenant borrowers. The dependence on the landlord was associated with or reinforced by dependence of all other members of the tenants' household. They found the tenants and the other members working for the landlord under exploitative conditions. The study revealed the existence of bonded labour in those villages in return of the interest free loan until loans were repaid.[67]

2.2.38. Prasanta Kumar Bhanja, found inadequacy of credit to be one of the reasons for overdues. The loans issued by primary credit societies were inadequate for 78.4 % of the farmers, of whom nearly 32 % were small landholders. The farmers are therefore constrained to borrow from moneylenders for the rest of their credit requirements. They prefer to repay the loans taken from the moneylenders first, because of greater pressure from them. Hence, the borrowers may not have significant surplus money to clear the debt due to the society. As a result overdues accumulate.[68]

2.2.39. Raja Gopal In his article "Agricultural Financing in Changing Perspective-An Overview"[69] has stated that prior to five-year Plans, no deliberate effort was made by the Indian Government for the development of agriculture and it remained a neglected sector. No doubt, after nationalisation, the commercial banks are actively engaged in the task of financing agricultural sector, but even after the passage of two and half decade, there appears to be no significant change in the socio-economic status of peasant community. Faulty lending policies, inadequate loan amount, non-cooperative attitude of bank employees and complicated procedures of granting loans by the banks, etc. are the main hurdles in the walk of financing by the banks. The author feels that the time has come to have a fresh look on the problems of the farmers and to make the banks to amend their existing banking practices, rules and regulations to enable the people to get the bank aid easily. Despite the presence of commercial banks in rural sector, even today the people are dependent upon moneylenders for their credit requirements.

2.2.40. Rao H.N. In an article "Expanding Role of Banks in Rural Economy" makes an attempt to evaluate the role of banks in the rural economy. He opines that no doubt, commercial banks have contributed substantially for the development of rural sector mainly through agricultural development, but landless labourers and small and marginal farmers have not been benefited by the bank credit so far. He thinks that the banks have to play a leading role in the rural credit market.[70]

2.2.41. Sharma B.P. in "Role of Commercial Banks in Developing Economy" has observed that financial institutions, particularly commercial banks have been playing an appreciable role in the promotion of primary sector and mobilising rural savings since nationalisation. According to him there are much more to be done in this direction. His primary finding is that the banks have failed to recognise the credit requirements of people belonging to lower strata like village labourers, small and marginal farmers etc.[71]

2.2.42. Subrata Ghatak comments that in spite of the growth of institutional agencies between 1951 and 1968, the unorganised sector continues to provide about two-thirds of the rural borrowings. The study on interest rates in this sector showed that risk and uncertainty factors as well as the administrative cost could largely explain the high rates involved in lending to agriculture. Considerable defects were observed in the operations of primary credit societies, and the co-operatives failed to take up the responsibility of marketing and credit. According to him capital investments were the most significant variable than the consumption expenditure[72]

2.2.43. Suzanne Paine suggested that most important characteristics of pre capitalist production in agriculture, which affect rural credit markets and the determination of interest rates is the evaluation of the default rates. The conventional view of risk interest is invalid. The borrower's rather than the lender's ris dominates the credit market, because of its interrelationship with pre-capitalist land, labour and commodity- market conditions. There are a number of studies analysing the interest rate structure prevailing within and outside the money market.[73]

2.2.44. Tunwai. U has made some interesting observations on interest rates. According to him in countries with unorganised money markets and institutional and non-institutional credit are equally important, the weighted average of interest would be around 24 % per annum. In those countries where non-institutional credit is of greater importance, it will be 36 %. In most underdeveloped countries where non-institutional credit is relatively more important than institutional finance, the rate of interest usually fluctuates between 24 and 36 % per annum.

2.2.45. Vashisht.S.K. arrived at the conclusion in his study that in an agriculturally advanced region in Punjab, 88 % of the loans granted by institutional credit sources were utilised for productive purposes and only the remaining 12 % were utilised for consumption. Among productive purposes, cost of fertilizer accounted for 61 % of the total credit. Social and religious ceremonies accounted for 5 % of the total credit.[75]

2.3. Review of Studies in Traditional Marine Fisheries Development and Fish Marketing

2.3.1. CMFRI Study team in their evaluation of the economics of ring seine fishery along Kerala coast has tried to study the economic outcome of motorisation of the traditional fisheries of Kerala. In their opinion, the technological change in ring seine fishery followed by the cooperativisation of ownership of fishing equipment is the most positive gain out of modernisation. The economic gain of the ring seine fishery, according to them will bring in more diversified techniques in the near future[76]

2.3.2. CMFRI study team through their special publication No. 45, "Motorisation of Country Crafts in Kerala- An Impact study" has tried to analyse the effects of motorisation of the country boats. In their stock taking study conducted at the end of the first decade after the onset of motorisation, they seem to be satisfied with the results. Despite some problems like kerosene supply, use of some gear, availability of service stations etc. their findings shows positive signs of growth in the sector. [77]

2.3.3. Bhushan, B., has studied the socioeconomic impact of mechanisation of fishing craft on traditional fishermen. The main findings of the study are (a) Excessive mechanisation has created dissatisfaction and in feeling of helplessness among small traditional fishermen. This dissatisfaction has converted into violence in some places. (b) Traditional fishermen have not been able to achieve the benefits of the mechanisation. The lion's share of the benefits is being taken away by the private entrepreneurs. They may be involved in fishing community but not in catch of fishing. (c) As a result of mechanisation of fishing craft, there is a constant decline in the landings of the traditional fishing crafts in most of the states. This has resulted in shortages of locally consumed fished and higher prices of fish.[78]

2.3.4. Katar Singh through his study on fishermen Co-operatives in Kerala arrives at the conclusion that there is no change in the borrowing pattern of the fisher folk after the establishment of co-operatives and the entry of banks in the sector. The money lender-cum-trader still plays an important role in the lives of fisher folk. Many exploitative practices such as udambadi still prevail in most of the fishing villages in the state. The co-operatives face a number of organisational and management problems which need to be resolved expeditiously.[79]

2.3.5. Platteau observed that the credit requirements of a fishing economy are different with other segments of the economy. In his study it is found that credit market in such an area is interlocked with rest of the factor markets. According to this study it is estimated that non-institutional sources especially friends and relatives contribute more than 57 % of the total loan transactions. He has also made a detailed study on the technology, credit and indebtedness in marine fishing with the context of three fishing villages in Kerala. This study has tried to throw light on changes of fishing occupation and dynamics of change to which they were possibly subjected.[80]

2.3.6. Programme for Community Organisation (PCO), CIFT study team conducted an elaborate study in to the economic results of motorisation of the traditional crafts in Kerala by name 'Motorisation of Fishing Units- Burdens and Benefits'. They have arrived at the conclusion that there are no specific effects on the efficiency of the fishing units as expected out of motorisation on the crafts. Despite the increase in the investment and resultant indebtedness, the introduction of modern technologies has not enhanced the income earning capacity of the units. They also find the role market intermediaries to be a limiting factor in the progress of fishermen[81]

2.3.7. Rajan. J.B. has tried to study the credit market structure of the small-scale fisheries of Kerala Coast. According to him, more than 65 % of the share of credit in the sector is by the informal sources. In his opinion the cost of such credit is not exceptionally high and unethical though from the rate of interest it may feel so. He too, like the studies made in other sectors arrives at the causes of less popularity of institutional credit, like unrealistic credit systems, rigid and inconvenient procedures, scheme based loans, and the general approach. Accounts of fishermen prove that 70 to 80 percent of the borrowing is outstanding. He suggests for a separate credit policy for fisheries sector based on a need-based approach.[82]

2.3.8. Richard Pollnac offers a concise, study of the peculiarities of fishing communities and their relevance in development design. He has identified social and cultural characteristics that are rooted in fishermen's production. He examines the issue of incremental income distribution in small-scale fishing communities. He argues that only wealthy fishermen or others, who are already well off, can afford to have the costly new technology to increase production. This new technology gives them a further advantage over the poorer fishermen. He has examined the trade off between increased technological efficiency and adverse social effects such as unemployment and greater social satisfaction. He underlines the role of co-operatives in fishery development.[83]

2.3.9. Viswanathan. C. has studied the internal marketing system of marine fisheries products in Kerala in contrast with that of Andhra Pradesh. According to his study the role of market intermediaries is the most important in the finance and market segments of the traditional fisheries sector. He finds fault with the existing system and recommends for a co-operative based institutional system capable of making the fishermen price makers rather than price takers in fisheries marketing[84]

2.3.10. Yap C. L. has studied impact of trawling on employment in context of West Coast of Malaysian Peninsula. He concluded that improved technology has brought about reduction in unemployment among fishermen who earlier had to resort to alternative occupations. This has lead to higher degree of social stratification within the fishing community.[85]

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CHAPTER - 3

GENESIS, SIGNIFICANCE AND ROLE OF MARKET INTERMEDIARIES AND FINANCIERS

This chapter makes a quick review of the history of market intermediaries and indigenous financiers in India. The presentation is based on the review of literature in banking and marketing with reference to the policy decisions or major laws enacted by the governments from time to time relating to rural banking and marketing.

3.1. Financing Market Intermediaries in India In the modern competitive economy, the implicit significance of marketing and finance is almost identical and has been the key factors in determining the rate of development. In India, there have been several persons, Joint Hindu Families and business houses who were simultaneously engaged in trading and banking business. They include Saucar, Bunniah, Chetty, Nanavathy, Nattukottai chetti, the Multani, the Arora, the Rathy, Mahajan, Tharakan and the Shroff.[1] The well-known indigenous bankers like the Mahajan, Chetti, Banniah or Saucar were an indispensable figure in the social organisation and a crucial factor in the agricultural economy of the country. Their position in the financial circles of the Presidency Towns was unique, and they were referred to as the shroffs. Primarily, they were providers and facilitators for the local production and trade, who offered credit in simple terms for varied purposes on personal security, refuge of land, produce or other tangible assets. They engaged in trade and money lending simultaneously against the concepts of modern banking,. They created and circulated indigenous credit instruments; procured, graded, stored and processed primary produce; facilitated export and import trade; catered the long term development needs of producers; financed the government during emergencies and acted as the local force in bargaining for price. There are different types of middlemen or intermediaries in the primary markets of the country. Some of them are known as adatias or commission agents; whereas the others are known as dalals or brokers. Adatias are again of two types, namely, the katcha adatias and the pacca adatias. Kutcha adatias are generally concerned with the assembling of the produce in the villages. They confine themselves mostly to vegetable and fruit markets. Pacca adatias act on behalf of the out station buyers as also on their own account. Many of pucca adatias also advance money to the Kutcha adatias to make purchases on behalf of their clients[2].

3.2. Significance of Market Intermediaries Marketing has been the venue of aggressive and concerted efforts for competitive selling of goods and services, which are normally available to any buyer in his vicinity. The American Marketing Association defines a market as the aggregate demand of the potential buyers for a product[3]. P. Kotler believes a market as an area for potential exchanges[4]. Therefore, negotiation is a prime factor in market. There arises the importance of market intermediaries, without whom, exchange with consistency and economy becomes tiresome. The market intermediaries are managers of the primary markets. Marketing management signify marketing concept in action, which involves planning, implementation and control of sales programmes. This is an area of specialisation and expertise and nobody can expect the producers and consumers to take up these functions and meet in the market to exchange their supplies and demand [5]. We need experts who can make better bargains for us, otherwise our products will remain unsold and on the other hand we cannot get the most suitable ends for our wants. This is the real situation prevailing in many countries, where, due to the lack of judicious finance and realistic management of marketing, many productive occupations have to stand still or even face extinction. In this era of globalisation, third world nations like India will have to face severe competition from the global giants in marketing. Any redundancy on our part to take up this challenge with expertise and strategy would bring disasters, resulting in economic slavery, unemployment and ultimate poverty and starvation. Thus, we require a factual review of our concepts and approaches to market organisation and financing to equip ourselves take up the challenges ahead. For sustenance and promotion of agricultural and industrial development credit is essential. An elastic credit system that fits the productive requirements of the community is undoubtedly the spring board of economic growth. A healthy money market is the result of a fully coordinated system of credit, possessing different types of complimentary institutions with total commitment to growth. In India, this function of managing primary markets and financing primary sectors were undertaken by these market intermediaries and still continues to occupy a prominent role in the rural economy.

3.3. The precedent of Financing Market Intermediaries The structure of the ancient markets of our country was simple and predominantly handled by private traders. A group of financing middlemen were holding the banking and marketing functions simultaneously. Many of them issued coins and bills of exchange for the kingdom and operated a credit market for financing the rural occupations and at times even the governments. Evidences are forthcoming in abundance that the business of trade and banking were perfectly understood by the people of ancient India and fairly practised by them. Dr. S. V. Ketkar speaks of eighteen guilds of different trades and the Mahasethes arbitrated in matters of dispute between the different guilds, who issued coins as well as credit instruments[6]. Dr. Pramathanath Banerjee quotes from Gautama, Brihaspati, and Baudhayana verses which regulate the rate of interest. The institutes of Manu give us rules regarding the rate of interest and the policy of loans. Kautilya offers some interesting advises on this point[8] Sir W. W. Hunter gives us valuable information as to the manner in which a private banker sets up his business.[9] The range of business practices of the village banker of the early part of the 19th century are dealt with in detail by Mr. A. F. Tyler[10] Mr. Thorburn describes colourfully the "greed of gain" on the part of village "banias" of the Punjab and the method of operation which tended to lessen the agriculturists into a state of abject slavery.[11] Some glimpses of the indigenous system of money lending and trading can be obtained from Mr. Malabari's account of Guzerat (Gujarat).[12] Sir Richard Temple testifies to the fact that banking business were carried on by our ancients beside other trade. He estimated the number of bankers to be one hundred and eighteen thousand, of which several are money-changers. There were half a million villages with about two bankers to every village.[13] The Census of 1931 estimated the number of financiers to be about 14,61,000 including bank managers, moneylenders, exchange and insurance agents and money-changers. Speaking of their locale it remarked that "banks and moneylenders are plentiful in the Punjab, their number exceeds the general average in Bombay, the Central Provinces and Berar and the United Provinces while in Assam it is only one per mile."[14] Epigraphic evidences regarding the prevalence of banking in Ancient India can be cited from the pages of The Indian Antiquary. Dr. Radha Kumud Mukherjee cites both literary and epigraphic evidences as regards the popularity of mixed banking in ancient India[15]

3.3.1. Financing Market Intermediaries of Medieval India Much has been known from the historical inscriptions and research works about the state and society in ancient India. The description regarding the function of state and its impact on the society, by and large, emphasises on the economic conditions of the people. But very little is known about such ideas in medieval period. However, the movement of trade and banking in this period can be studied with reference to the administration of Delhi Sultans, Mugal Dynasty, Vijaynagar Kingdom and the rule of Peshwas in Maharashtra. Some literature on the internal and external trades during these periods is available as studied by the historical researchers. The trade in the medieval period was dominated by the financing intermediaries and exports of various commodities were carried out by them, strengthening the state revenue. The prices of most of commodities were settled by the ruling authorities on the basis of the prices of preceding periods and their response in the exporting countries. The products were collected by the commission agents, who financed the producers by giving loans as advance price. These goods were later placed in the weekly markets by these merchants who had arrangements for grading at town markets, from where the commodities were exported or redistributed in the state after processing. Many of the indigenous financiers held high political authority at the Mugal Courts, especially towards the last years of the Mugal rule. The political influence of Jagat Seth and Omichand during the Plassey days is well-known, to students of history. The Seths of Madhura exerted much influence on the political history of South India. Historians have recorded that these bankers granted loans to rulers and financed their long protracted wars[17] Every Native State had its banker who took an active part in the financial administration and trade management of the Princely territories.

3.3.2. Role in Colonial Period The British regime, through East India Company penetrated in to an India, well-off with a prosperous banking system, marketing network, flourishing handicraft and cottage industries using relatively advanced techniques, with a distinguished social structure based on the surpluses from farming. The colonial administration converted the traditional payment to the state, in the form of a proportion of actual produce in kind, into a fixed payment of land revenue in cash. The land revenue was calculated to be five percent of the gross produce per acre in Central Provinces, seven percent in Berar, seven to thirteen percent in Delhi and Bombay and twenty percent in parts of Gujarat, according to soil and irrigation availability in the respective regions.[18] The conversion of traditional share of the state into fixed money terms made the farmers more dependent on the market, both for the sale of crop and for borrowing credit. Although the share of the state declined over the years because of the fixed land revenue and increasing agricultural prices, the financing intermediaries and the zamindars were paid in the form of return in kind. The returns were allowed to be determined by market forces without any social and legal checks. The colonial administration did not care to use the surplus from agriculture for the industrial development of the country, which would have laid firm foundation for sustained economic growth. Instead, they used their political power to take away the essential raw materials to their country to produce goods that are to be brought back to India for sale. The advent of the British Rule dispossessed the financing intermediaries of their political significance and prestige. The traders began to specialise themselves and the indigenous bankers continued to play their usual economic role in financing trade. Some of them financed the wars of the East India Company. Till the European Agency Houses and Merchants successfully settled in the country, the coastal trade of Bombay with Arabia and the South African territory was financed by the traders of Surat. Many of these old trade houses were replaced by the modern indigenous bankers, financing the internal trade of the different provinces and played an important part in the financial organisation of the money markets in the different cities during the British Rule. They became the recognised moneylenders, money-changers, bullion merchants and financial middlemen.

3.3.3. Results of Contact with Western civilisation With the advent of Western business methods in British India, the cultural supremacy of the indigenous bankers and market intermediaries began to decline. New institutions such as the Civil courts, the Laws of Contract and Limitation and the service of legal practitioners soon gave scope to the indigenous bankers or the wicked moneylenders to exploit the peasants and artisans, who did not know how to make a fair use of the rights of occupancy and ownership conferred on them by the law. Moneylenders soon degenerated into land grabbers and their pristine honesty and scrupulous regard for truth soon became dimmed by the more materialistic tendencies that have been introduced of late into the calm and placid atmosphere of our social life. Noticing this deterioration, Sir R. Temple rightly remarked that "the passing of English law of bankruptcy has demoralised the native bankers of the Presidency Towns."[19] Throughout the nineteenth century and in the first two decades of the twentieth century new rival financial institutions were being created and the indigenous bankers found their field of business restricted. Though they were fast losing their prominence, they were making no efforts to adapt themselves to the altered circumstances of modern banking. Instead of developing into modern bankers pioneering corporate financial activity, they preferred to conduct mixed banking business in the same old traditional style.[20] Solidity and economy were the prominent features of their banking business, but they were lacking adaptability and initiative, the characteristics that a sound banking system should possess.

3.3.4. Prevalence in Nineteenth Century The markets dealing in farm and non-farm products had only a slow growth after the peace of World War I. Following the war, the economy had a severe setback in terms of production, income generation and employment. This situation reflected largely in poverty and seasonal cycle of dispersed production system. These two factors dominated the structural changes in the market conditions in India. The uncertainties in agriculture prevented the growth of uniform commercial opportunities and the possibilities of centrally controlled marketing system in India, as assessed by the American trade consuls during the early recession period of Indian economy. The growing indebtedness of small and marginal peasants and the poor output of crops increased dependence on outside traders across the country and seasons. As a result, the markets were divided in two hierarchical tiers: (i) village markets which held periodically, and (ii) the town markets, where the wholesale trade was organised by the arhatires (commission agents).[21] The Indian peasants had orientation only in production and management of crops and not in the processing or adding value of products like jute, cotton, sugar cane, tobacco and other plantation crops. The European business community exploited this opportunity and developed Indian markets as subordinate to their capitalistic mercantilism. The market intermediaries adopted themselves to the situation and most of them transformed to financing middlemen, booking their right to sell the raw materials to the European industrialists through forward sales.

3.3.5. Increasing Role of Middlemen The colonial regime brought many changes in the structure of money market, land holdings, farm organisation and cropping pattern during the last century of their rule in India. Traditional indigenous money market was transformed into joint stock banking under a central bank; small and medium sized farms were converted into large plantations; farming practices were brought under organised industrial sector, etc. Indigo, the traditional plantation crop had been substituted by jute, on exhaustive market demand by the British in West Bengal. Besides, the genuine plantation crops, tea and coffee grown mainly on the hills have been under British control from the stage of production to shipment to London. However, the Indian capitalistic enterprise was also passing through a vulnerable phase, during the mid-colonial period as the economic pressure in terms of increasing debts of small peasants and cottage industries entrepreneurs. However, only the bazaar, the rural market could deliver the goods from the bottom to the top because of the spatial inter-working with complex financial arrangements[22] The informal financial markets were functioning in the country in large scale which extended credit support for agricultural operations during famines and seasonal uncertainties. These markets were largely dominated by the shroff and commission agents. Despite seasonal variation in input costs, market prices and cropping pattern, the food grain production showed significant growth. However, during the period of economic recession, from 1925 to 1937 the exports suffered considerable setback.

3.3.6. Emergence of a New Market Economy The indigenous informal bazaar based money markets of colonial India operated through twin instruments of hundi (bills) and arhat (commission). The Finance provided by them was used for assembling, distribution and financing production of as much as 36 million small and marginal farmers. The imports and exports operations were carried out through the principal ports located at eight trade terminals, namely, Karachi, Bombay, Cochin, Tuticorin, Madras, Visakhapatnam, Calcutta and Chittagong. Besides, 76 million tonnes of food grains were moved through railways and 85 million tonnes through carts between the market towns during mid-1930s in the country.[23] The mobility of goods and services formed a three-tier marketing hierarchy viz. (1) the financial and commercial centres at the terminal level (top of pyramidal structure), (2) town markets at intermediate level establishing link between the top and bottom level markets in the hinterland and (3) rural periodical markets spread widely at the grassroots of the India's domestic economy of India. The terminal markets located in two big cities of Bombay and Calcutta largely catered the international economy of India during the early twentieth century. However, the nodal points for promoting the domestic economy invariably vested with the numerous market towns, locally known as mandi. They had regional specialisation in commodities, e.g., Layalpur for cotton and wheat in the Chenab Valley of Punjab, Hapur for wheat in Uttar Pradesh, Khemgaon for cotton in Berar (now in Maharashtra) and Guntur in canal irrigated Krishna Valley (now in Andhra Pradesh). Mandis were the market places where produce in primary stage was assembled for despatch to main distributing centres in intermediate hierarchy. The produce used to arrive from various rural markets held periodically or fairs organised seasonally. The more regular rural markets, known as shandis in southern parts of India, peths in central and northern India and haats in the Bihar and Bengal, played vital role in assembling agricultural and urban manufactured products for retail transactions. The method of direct purchases from mandis to reduce the arhat or commission on the transactions was systematically initiated as a policy by Ralli and Volkart before World War I, which continued till mid-1930s. They were large international trading concerns in India's agricultural produce market, principally in the sale of groundnuts, cotton, oil seeds, tobacco, tea, coffee, etc., send to the London market. However, the great depression of 1930s hit at the foundations of these widespread export houses and led to closure glutting the grain supplies in the local markets.[24] Overcoming the consequences of depression, the financial and commercial transactions were set to networking in Indian economy at all levels of market. The terminal money markets of Calcutta and Bombay had gradually notched the top of economic system. Table 3.1 depicts the growth of the general and financial markets in India during mid-1940s.

TABLE 3.1. MARKETS NETWORK ACROSS INDIA DURING 1943

Region	International Markets	Shandis & Financial Markets	Mandis in Main Provinces
Assam	4	1,213	54
Bengal	61	5,862	174
Calcutta, Chittagong & Bihar	348	2,535	74
Bombay	36	961	198
Ahmedabad & CP	13	2,307	64
Madras	113	906	237
Madras, Cochin, & Tuticorin	127	23	157
All India	1,733	22,080	1,718

Source: Ray, Rajatkant; "The Bazaar: The Indian Economy Before & After the Great Depression", *The Indian Economic and Social History Review*, 25(3), 1988 p. 290.

3.3.7. Changing Nature of Agency Business The emerging market economy came out with a new manifesto of economic integration through amalgamation among various levels of markets dealing in commodities and finance. The network of 1,718 mandis and 22,080 shandis was connected with infrastructure and communication system. The agricultural and commercial crops still continued to transact through the arhatiyas and shroffs, the traditional financing intermediaries. The mechanism through which the grassroots, intermediate and terminal level markets operated, took some structural changes giving way to some lucrative styles mainly in the form of:

(1) Goladani (retention or storage)

(2) Badli ka satta (forward trading through speculation)

(3) Teji aur mandi (boom and depression in commodity trade)

(4) Arhat (commission agency)

This usurping intervention of middlemen continued till independence, which raised the dominance of private traders to the extent of severe exploitation of small farmers. Consequently, the state intervention to regulate the market operations was felt necessary and policy towards 'agricultural produce marketing' was thought of[25] The coincidence of speculative trade and financing by the intermediaries, created a sense of unruliness in the traditional money market and the public opinion went in favour of the government decision to curb their activities. This situation favoured the institution and growth of co-operative and commercial financing houses, which later refused to sponsor the role of intermediaries.

3.3.8. Impact of Government Policy In the beginning, the administration felt a need to investigate the economics of primary occupations and changes within it, the credit operation and the trends in output and marketing behaviour. In British India, the imperial rulers mostly depended on the village for revenue, which guaranteed their political severity. Thus, the peasant's interest regarding high production and remunerative prices was kept in abeyance all over the period of imperial ruling. This imposed insoluble constraints in the extent of agricultural production for the market. The fundamental problem outlined during the British period towards agricultural production and marketing is the 'glow level trap' model, consisting of purely institutional pull backs such as credit, agricultural extension, price trend, taxation, etc.[26] The main cause for the low marketable surplus was found to be the high level of taxation over the land and production. The situation endangered the peasant's long-term security by damaging his productivity. India as the 'paradise of middleman trade' was a frequent image presented by contemporary western commercial interests. For example, within the British cotton industry it was often alleged that the existence of mass intermediaries between the peasant producers and the foreign buyers raised costs and undermined the competitiveness of Indian raw cotton. The regulated markets in India after the medieval period are found to be at par with the legislation in Britain. The state control over the squalid urban markets in Britain was imposed through the Victorian predilection for Municipal Order and Hygiene Acts. By 1920, there were 32 such Acts, mainly concerned with the sale and slaughter of cattle, and with transactions in wheat in the local markets run by sheriffs or stewards. A committee to investigate and comment on the prevailing legal chaos on British agricultural markets was set up in 1922 and since Lord Linlithgow hold the posts as chairman of the committee, Royal Commission on Agriculture (1928) and Viceroy of India simultaneously; the recommendations of the committee in 1922 became worth mentioning.[27] The committee deplored the dean of information on markets, and suggested the control of free trade in agricultural commodities at all stages, from production to consumption. It observed that in Madras, Bihar, Central Provinces and Berar, the markets were easily and efficiently run by the local authorities. But, with an expanding market economy, local autonomy had to be canalised to ensure the standardisation of exchange aspects such as weights and measures, fees, charges etc. The Royal Commission on Agriculture recommended commodity surveys to determine the imposition of similar controls as in England over India. In early 1930s the provincial legislation to regulate markets were drafted. In 1933, the Madras Commercial Crops Markets Act appeared.

3.3.9. Effects of British Laws on Primary Sectors The marketing conditions varied during the colonial period from province to province and in respect of different products. Nonetheless, in spite of the diversity of the system under which agricultural produce is marketed in different parts of the country, there are certain broad generalisations which can be made for India as a whole. It has been established that where the cultivator is in a position to dispose of this produce in a market, however limited its scope and badly organised its character may be, the cultivator obtains a better price for it. If cost of transportation and other factors like indebtedness is high, he disposes of this produce in the village to the moneylender. This was a very highly observed characteristic of produce marketing in British. The farmer was compelled to sell his produce so, either due to lack of transport facilities or indebtedness, which compelled him to rely on to the village traders and accept the term dictated by the latter. Another reason argued in several studies were the dissatisfactory communication with the nearest market.[28] The Punjab Communication Board, in 1923 elicited that in some districts of the provinces, e.g., Karnal, the bulk of crop was sold to the village traders at the dictated price of the buyer. In the adjacent district of Rohtak, where the cooperative movement had a good impact, the proportion was one-half and in Layalpur market the mandi (regulated market) had influenced the sale and procured almost all produce.[29] The citation indicates that during the British period the cooperative movement had made some progress and the regulated markets were also in existence. In the British period, the state agriculture departments used to promote a useful means of selling to the cultivator, an adequate premium for the super quality of the produce. The system thus developed was auction, particularly during the early stages when the quantity available was small and the trade was without an organisation to enable it to be taken up at its intrinsic value. But, as regards the cereals and other food grains, the village traders were predominant. The business efficiency was adversely affected due to lack of standardisation of measures and weights. Needless complications and unevenness in practice between markets tended to prejudice the interests of the cultivators. In the sixteen markets of the East Khamdesh district of Bombay Presidency, the mandi had thirteen different values. In the Jhelam district of Punjab province six different measures were used by which grain was bought and sold. The Berar and the Bombay market legislation provided the regulation of the kind and description of scales, weights and measures, in 1913, on the recommendation of the Committee and Standards and Regulation[30]

3.4. Continuing Role of Middlemen There had been the transaction of commodities through brokers in most of the markets who acted for both buyers and sellers. The Government of India had imposed the prohibition of brokers from acting in a dual capacity. The regulated markets were functioning for the wholesale trade of selected goods. The local markets were established for retail as well as wholesale trade. The authorised markets within the radius of regulated markets were prohibited. The existence of multitude of intermediary links in the marketing of primary produce during the colonial period speaks for itself. The commodity transfer network, the system of trade throughout the country was managed by a variety of middlemen, each of whom absorbing a share in the sales proceeds. These middlemen had also an agency for noninstitutional credit supply to the various producers. The extremely high degree of regional demarcation by the merchant cum-moneylenders was noticed. A characteristic feature of the middlemen was that the overwhelming majority of them belonged to semi-feudal landowners. This behaviourism led to the exploitation of the peasantry in many ways.[31]

3.4.1. Lucrative Practices The business practices of the moneylenders and merchants were diverse. At the onset of the market working, the price was decided by the buyer or his agents. If the buyer was not present in person, the negotiation took place between the middleman and the agent of the buyer. The middlemen were engaged more in the transaction of the cash crops than food grains e.g. cotton. Buyers, after verifying the quality of the products, settled price through extensive bargaining. In this process, the produce is weighed, quality is listed and heaped. Since the grower had to depend totally on the middlemen for getting his produce disposed, it was difficult for the cotton grower to take back his produce despite an unfair deal. Academic attention focused on the economic behaviour of indigenous traders and merchants in India during the period of British ascendancy. The late eighteenth century was a period of crucial importance for merchants, middlemen and the trading structure in Bengal. Here, a century or more of European commercial penetration assumed a different character, with the political advantage firmly in the grip of one corporate body of foreign traders- the English East India Company.

3.4.2. The positive Role The local trade, which possessed the closest connections with the system of primary production, received little attention on its merits. The existence of innumerable intermediaries between the primary producers and the merchants stationed in the great cities gave the general impression that:

(i) local trade derived its existence solely from servicing the upper strata, and (ii) it was a somewhat 'shadowy' sphere people by a medley of intermediaries- beopairs, paikars, goomastahs, etc.- the functional differences among whom are not always recognised and whose activities seem to converge in a confused tangle of 'petty' dealings.[32] The view that the function of local trade was to draw goods and commodities out of the production zone, away from the localities and towards urban centres was true to some extent. The networks of local trade formed little microcosms in themselves, each with its own tiny substructure, which became a component in the general structure of Indian trade as a whole. At the base of the structure of local trade stood the petty traders, who occupied a predominant position in the complex of agrarian relations that existed at the village level. These were often moneylenders and rich peasants, who had their goals and stores, where grain was often kept for five or six months, and they put their affluence to good use by lending to poor farmers in grain and money, sometimes in a very big way, as in Shahabad.[33] Thus, the group of dominant peasants used its position within village society to branch out into trade. Buchanan describes them as 'trading farmers'. They purchased the produce of their neighbours at harvest or by means of advantages even before the crop standing in the field was ripe. Part of this grain usually found its way to the market. The people with whom the local traders came into contact in the stalls and market towns were the mahajans- usually men of substance and considerable merchants. Those dealing chiefly in grain (very often in combination with articles called kirana, i.e., salt, betelnut, iron and sometimes sugar, oil, tobacco, coconut, sackcloth, and a wide assortment of other articles) formed the case of the general trade. Those big wholesale merchants very often carried on money lending side by side with their other trading activities. Usually, these big merchants and mahajans possessed direct trading connections with big cities. The rural towns were also the base of operations for non-local merchants or their agents, and paid employees who were interested in buying grain from the interior. This role of the middlemen ought to have measured as the most positive factor, since in their absence, the primary sectors would have not sustained. Similarly, Dalals or brokers, who had no capital engaged in trade but earned their living by bringing together buyers and sellers, were also to be noticed in the grain trade of the market towns and gunjes. If a predominant aspect of local trade was the conveyance of goods to nodal points for transportation to cities, catering to the needs of local consumers comprised its other side. Thus, a variety of retail dealers were to be found at the level of local trade and grain was an article in which practically all of them dealt.[34]

3.5. The Structure of Market and Hierarchy of Middlemen The hierarchy of the financing middlemen and traders during the colonial period was in the form of a pyramidal structure, whose broad base supported the activities of small traders or petty traders at the village level. The middlemen, locally called as dalal in north and eastern India, occupied just above the base level group status, who were in direct contact with the large urban centres and cities, which were sustained by goods and services flowing up from the countryside. These middlemen were connected with the big merchants who were also money lenders. What further strengthened the ties between urban centres and their widely dispersed hinterland was the system of forward purchase which enabled the big merchants located in cities to stake a claim on the crops still standing in the fields. This was also in the case of fruits and vegetables as the big merchants, though the intermediaries, used to assess the value of the crop in the field and pay money much less than its post-harvest value to the cultivator. There is evidence that large quantities of grains entered in the trade nexus had already been spoken for in advance. These advances ensured the moneylender-cum-merchant of an assured supply of larger quantities of grains at lower prices that what could be procured in the open market. However, the ready money transactions and forward purchase coexisted between the primary producer and purchaser of grains, irrespective of their territorial demarcations. The seasons also gave the grain trade a particular fixed time for its purchase from the villages and its consequent sale at rural markets. Thus, between the seasons and the nature of grain as a commodity endowed the grain trade with the character of a water-borne commerce, operating usually in a short-term market in keeping with the rhythm of the seasons. In fact, it was also the seasons which determined the amount of grain which the advances filtering down from above could secure. The quantity of grain in relation to the advance depended on the time when the latter was made, that is, on the distance of the advance from the harvesting season. During famine conditions, merchants in deficit areas would send their agents far and wide to procure grain as the prevailing level of prices would compensate for the exorbitant transport costs. The whole mechanism of local trade functioned within the parameters of a structure of control and domination. Almost all the groups who worked together to keep the mechanisms of local trade in operation possessed a substantial degree of power and influence over the other men in the same profession. Rural markets, whether permanent like gunjes or periodic like hats, owned their origin and their continuance to the activities and to the support of zamindars, revenue officials, and other officials associated with the administration. The income from markets went to the government and the nominee who collects the revenue respectively. But markets situated on malguzari and zamindari lands were officially recognised as 'belonging' to that particular zamindar, and the income from the market was included within the latter's jama as 'saving'.[35] At the market towns, local trade was exposed to the exactions of the zamindars. These were primarily of three kinds: ground rents on houses and shops of settled inhabitants, duties on all goods carried into and out of the market.

3.5.1. Entry to Agency business In the earlier days of the East India Company, the native manager of an English agency house and of a ship captain was called 'Mutsaddi' by the natives and 'banians' by the Europeans[36] The banian was really a market intermediary, as the factor of houses and captains. Due to the absence of any European banking establishment, they had the sole charge of monetary transactions. A native agent was necessary, as the goods of the Company's officers could not be sold directly to the natives, on account of the ignorance of the native language. High-caste Hindus refused to act as banias as the commodities usually included wines, liquor, non-vegetarian food products and other provisions which could not be touched by the high caste Hindus. A washer man (doby) or Colootolah was entrusted with the duty of selling the goods. These dobys gradually set up partnership with other friends to manage the business. Seeing the lucrative nature of their business, legions of high caste Hindus started to act as dobys to the captains of ships and the name dobys was changed to banianship. After the withdrawal and abolition of the company's monopoly, several of the identical banians served them again as their merchants and agents. (See the Selections from The Calcutta Gazette.)

3.5.2. Hereditary Business and Inherited Tactics Money lending and intermediary business was purely a family concern and had been a hereditary vocation among particular castes and classes of society, such as the Marwaris, the Jains, the Multanis, the Nattukottai Chettis, Tharakans and the Kallidai-Kurchi Brahmins. Almost all members of this caste or class possessed fairly good business knowledge. They were remarkably judicious and thrifty in their habits. They had a special natural aptitude for earning and saving money. Generally no new ideas were acceptable to them. Their conservatism and traditional resourcefulness were undoubtedly strong assets and saved them from many a bad debt. While the small moneylenders can be considered as a set of low usurers, and the wealthier of these indigenous financing middlemen were private capitalists holding magnificent sums, and though they are often averse to the principles of modern banking. They formed private partnerships under the management of a senior partner or were organised as Joint Hindu Families. They seldom revealed their transactions to the public and it was only when these firms occasionally failed that the general public came to know the real magnitude of their operations. They were most courteous to their customers. They entertained their visitors with great intimacy and much friendliness but were very reticent to maintain strict secrecy regarding their business affairs. Very often in the old days they were appointed as trustees for village endowments and the management of these lines of property tended to increase their business knowledge, pecuniary resources and social status.

3.5.3. Lack of Perpetuality But the one greatest defect of their business of was that it lacked perpetuality, due to hereditary nature of the family. A founder of a financing trader concern may be a good banker, financier and business man, but it does not always follow that his son, who in all likelihood and certainty inherits the business, will be capable of running it. The concern wanted continuity of able talents in the family. It was difficult to find that all these factors, satisfactorily available in an agent's family. The efficiency and driving power which are found in joint-stock banks were seldom visible in these private banks. The joint-stock bank is not handed down by the deceased father to his son, but is always under efficient and capable management. This was the basic problem that told heavily against the indigenous middlemen financiers.

3.6. Government Policies to Avoid Middlemen The government's direct interest in the income of farmers, prices of food grains and the market rose up from the assumption of the bimani system in 1765, when the crucial importance of the harvest and grain prices to the total economy forced its attention towards the grains scarcity. The situation was aggravated by establishing the grain monopolies of the government through the countryside agents of big merchants. The cultivated area under cash crops was too small to affect the peasant economy. But the British trade policy favoured the proliferation of indigo, sugar cane and opium which resulted the reduction in food crops since 1790s.[37] During the colonial period, there were many restrictions on the movement of grains as the zamindars who were also agents of administrators, used to collect the tax at the innumerable check posts. The decision of the East India Company to initiate a scheme of state granaries had brought the state power directly into the gunjes or regulated markets, as a very big buyer and seller of grain. Such direct participation on one hand brought profits to some merchants and on the other panic and suspicion among the rest, due to the uncertainty of their forward market stocks.

3.6.1. Government Intervention in Primary Markets Primary marketing is a process which starts with a decision to produce some saleable commodity and it involves all aspects of market structure or systems, both functional and institutional, based on technical and economic operations like assembling, grading, storage, transportation and distribution. Under the ancient economy, characterised by isolation and self sufficiency of villages, the marketing occupied an insignificant position, since the producer or his household effected the exchange with his neighbours. The commercialisation of production opened scope for private trading channels, cooperatives and regulated markets, but due to ignorance, illiteracy and lack of enterprising ability, a large group of producers, consisting of small and marginal farmers, fishermen etc. could not strike a profitable bargain in dealing with their products. As such they were forced to seek the assistance of middlemen. [38]A study in this respect revealed that about 35 percent of the total production of farmers is sold by the cultivator, of which 24 percent to the traders and commission agents, 15 percent is disposed in kind of wages and nearly 8 percent is kept reserve for seeds. The result is that the private traders, through speculative activities, create imperfections in the market and exploit the producers on the one hand and consumers on the other. On this account, a plea for state intervention was usually made.

3.6.2. Legal Steps to Regulate Market The first attempt to regulate markets in India was made in 1897. An Act passed in that year authorised the then British Resident in Hyderabad district to declare any place within his jurisdiction a market for sale and purchase of agricultural produce and to constitute a committee to supervise and regulate the markets. The law helped to improve the buying and selling of cotton. But it suffered from one of the major limitations, viz., the market committee consisted solely of traders, and this defeated the declared objective of benefiting the cultivator-seller. In practice, the law was applied only to cotton, the main crop of the region. Income derived from the market was explicitly stipulated to go to the local municipal authority, instead of being ploughed back into the market for further development. Thirty years later, with the passing of the Cotton Markets Act, 1927 in Bombay, once again, the law was concerned only with a single crop. However, in an important departure from the Berar law, it gave the cotton growers a majority on the market committee. The Royal Commission on Agriculture, reporting a year later, urged that all provinces should establish regulated markets to help orderly marketing of all agricultural produce. It criticised the practice of treating regulated markets as a source of municipal revenue, and insisted that surplus incomes, if any, must be used solely to develop and improve the facilities and services for the benefit of the producers in the markets. Hyderabad, Central Provinces and Madras promptly acted on the Royal Commission's recommendations and passed appropriate legislation. Similar steps were taken by other states also; Punjab and Mysore in 1939, Madhya Pradesh in 1952, Kerala and Orissa in 1957 At the beginning of the Third Plan, the legislation for establishing regulated markets was in force in nine states.

TABLE 3.2. GROWTH OF REGULATED AGRICULTURAL MARKETS IN INDIA

Year	Principal Markets	Sub-markets	Total
1960-61	715	715	715
1970-71	1280	865	2145
1980-81	2289	2316	4605
1983-84	2045	3534	5579

Source: Government of India, Directorate of Marketing and Inspection, 1985.

3.6.3. Approach of Five Year Plans During the First Five Year Plan, priority was given for initiating steps to eliminate market intermediaries and money lenders. Regulated markets were established in Bombay, Madras, Punjab, Hyderabad, Mysore and Madhya Pradesh, where the management of these markets were vested to committees in which growers also represented. Some of the states like Uttar Pradesh, West Bengal, Bihar and Orissa, despite promulgating the Agricultural Produce Marketing (APM) Act, could not enact in large number of unorganised markets in the countryside. Moreover, the states gave priority in implementing the APM Act in all the regions. Apart from the imposing regulations in agricultural produce market, the main thrust was laid on the development of 'cooperative marketing' The plan envisaged that the cooperative marketing linked with production, finance and cooperative ownership of processing industries, will be a useful instrument in increasing production, reducing costs and introducing a system of crop planning. An important development during the First Plan was the passing of Forward Contracts (Regulation) Act, 1952 and the setting up in the following year the Forward Markets Commission. The Second Plan also proposed that the trade association may adopt the standard contract term devised by the Ministry of Food and Agriculture for wheat, linseed, groundnut, etc. A specialised training in agricultural marketing was introduced for better market information service. Several steps were taken during the First Plan period aimed at regulating the marketing practices, standardising weights and measures, developing suitable infrastructural facilities in assembling markets etc. Though, the legal framework has been provided through APM Act in most of the States, the progress in the development of markets and in the enforcement of Act, however, has been uneven.[39]

The primary consideration for the development of agricultural marketing in the Second Five Year Plan was to reorganise the existing system, so as to secure for the farmer his due share of the price paid by the consumer and serve the needs of planned development. It was estimated that the cooperatives may be able to handle about 10 percent of the marketable surplus by the end of the plan period. Rest of the surplus was suggested to pass through other marketing channels. The

Second Plan also stressed the enactment of APM Act in the states covered other than in the First Plant period. The plan also recommended implementing the legislation passed under the APM Act on grading and standardising farm products. The total number of agricultural produce markets in the country at the end of Second Plan was about 2,500. Of these, the number of regulated markets was 725 as compared to the 425 in the First Plan. [40]

The Third Five Year Plan proposed to bring the remaining markets to regulation and to expand the programme for grading the commodities and the APM (Grading and Marketing) Act. Till the Second Plan 500 markets were covered under the Market Intelligence Service. It was further proposed to strengthen the services in the following plan periods.[41] An increasingly important aspect of agricultural marketing found during the Third Plan period was the development of cooperative marketing with due weightage.

By and large, the Fourth Five Year Plan was aimed to improve the marketing system in the interest of the producer. The objective was to see the imperfections in the marketing system and to overcome the constraints. Under the Fourth Plan period, 1,300 additional markets were proposed to be covered. The development of infrastructure was identified as one of the major tasks to be carried, and roads, market yards, grading units, including other common amenities, were stratified for immediate attention. As regards the grading centres, 600 more units, apart from the Third Plan achievements, were planned during the Fourth Plan period.[42] It was observed from the plan document that the plan envisaged the development of infrastructure as first hand job and gave priority in construction of roads, building and grading units. The development of agricultural marketing was planned through the ways and means of cooperatives during the Fifth Five Year Plan. The plan envisaged to set up various cooperative marketing unions for the commodities and also boards to regulate trading systems of cash crops.[43]

The main thrust of the Sixth Five Year Plan was therefore on (a) further expansion of regulated market system in terms of both move markets and commodities to be brought within the scope of regulation; (b) strengthening and streamlining the arrangements for enforcement/inspections to ensure a regulated system of open auction, trading practices, and margins of intermediaries; and (c) development of rural markets and periodical markets and establishment of such methods in area where such facility is not available within a reasonable distance.[44]

During the Sixth Plan period, the progress and development of markets was intensified with the emphasis on survey, research and grading of notified commodities. The main thrust of the marketing programmes during Seventh Five Year Plan period (1985-90) was towards further expansion of regulated markets, both in terms of area and commodity coverage. The grading centres at the producer's level, intensified surveys to assess the marketable surplus, the post-harvest losses and strengthening of various organisations in the states as well as at the centre for meeting the rising requirements of training for market functionaries were other important sectors attended during the Seventh Plan period. In the plan document, it was recommended to amend the Agricultural Produce Grading and Marketing Act, 1937 with reference to the new scheduled commodities and more items of mass consumption, viz., suji, maida, etc.[45] The targets contemplated for the Seventh Plan were the development of 200 regulated markets, 50 terminal markets for fruits and vegetables and 1,500 primary rural markets with enactment of suitable legislative measures, survey, planning and design and engineering cells.[40]

The document of Eighth Five Year Plan (1992-97) envisaged strengthening of marketing infrastructure with special reference to the perishable commodities. It was one of the major prerequisites for the success of diversification efforts and enabling primary producers to realise a fair share of the price in consumer's rupee. The plan document endorsed the need of developing marketing linkages within and outside the country to promote diversification.[46] It was found necessary to develop marketing infrastructure besides improving the logistics in the movement and storage of goods in view to cut down losses at various stages of handling the produce. The role of cooperatives in setting up new horizons for domestic marketing was also argued in the Eighth Plan. The commercialisation of farming systems and the new seed policy for promoting non-conventional commodities like flowers and export-oriented vegetables has made considerable impact on the agri-business in the recent past. The document stated that the procurement and support prices for important crops will be fixed by considering cost of production, change in market prices, input-output parity, inter-crop price parity, industrial demand of food and non-food crops and related factors.

3.6.4. Price Regulation The state intervention is justified mainly because of the market imperfection in different regions and at different temporal points. The popular view in the low income countries has been that the traditional markets do not effectively perform the function of price signalling and that there are huge differences between prices paid by the consumers and those received by the producers, both over time and space that are caused by monopolistic profits in a private trade which necessitate the provision of alternative marketing channels in public and cooperative sectors. But, the cooperative marketing has not made much progress in the country. To understand whether the food grain marketing policies of the government have been effective in alleviating the shortcomings of the traditional marketing system, it is necessary to understand the factors which led to such interventions and to assess which of these factors have been effective. Of these, ensuring urban supply to meet with the overstated requirements of the deficit states, and in the drought conditions etc., have the important bearing over the state intervention phenomenon. The price instability reduces farm investment and supply and that large levels of instability may be associated by farmers with large risks. The government may reduce the level of instability by announcing the floor and ceiling prices within which prices may be allowed to fluctuate. When they decline, the government may purchase and when they increase beyond ceiling it may release domestic and imported stock.

3.6.5. Cooperative Marketing The need for cooperative marketing in India arose from a number of factors. Of these, the first factor was to discourage the malpractice involved in the existing marketing system. The cooperative movement towards marketing activities accorded considerable importance in the First Five Year Plan but activities remained at the low level of progress.[47] The stress has been given to reorganise the marketing cooperatives to make them more viable during the Fourth Five Year Plan. The two-tier organisational pattern of the cooperatives was recommended with an 'apex' organization at state level and primary marketing societies at the mandi level. The branches of 'apex' level societies were recommended at the district or regional level. The states where three-tier structure was existing no modification was recommended. FAO, earmarking the contribution of the cooperatives in regional economical development, states that there are some factors which have direct involvement on the promotional policies of the commercial sector with reference to small farmers. The farmers' marketing cooperatives have been chosen as instrument for development of the commercial sector of small farmers provided leadership is vested with the cultivators without state intervention.[48]

The marketing of agricultural produce by the cooperatives received a setback during recent past because of

1) Inadequate coverage of grower members,

(2) Low volume of marketing service societies,

(3) Inadequate link between marketing and processing cooperatives and of the state federations, and

(4) Inadequate financial resources.

The marketing cooperatives at the primary level do not have adequate resources either to undertake marketing operations at massive scale or to absorb the losses. Apart from these institutional constraints human factor is also equally important which affects the growth of the marketing cooperatives. Of these, (i) lack of loyalty of members towards organisation and understanding of cooperative principles, (ii) shortage of efficient management personnel and lack of training, and (iii) low levels of salaries, absence of promotional prospects and poor communication, are the basic factors which influence the negative growth of marketing cooperatives On the whole, commodity-wise marketing and processing of agricultural produce by the cooperatives has not made any significant impact in the marketing network. However, there are few exceptions like milk, sugar cane and cotton where cooperative sector is dominant and has shown tremendous dynamism in the western region.[48] This is due to vertical and horizontal organisation linkages established by the cooperatives through integrated approach. Despite few success stories there are certain issues which yet remain as pillar to withhold the growth in the cooperative sector. The most important question to be asked is: will cooperatives be able to withstand the scorching heat of an oppressive capitalism.

3.6.6. Monopoly Procurement Policy Indeed, the grand evidence on agricultural marketing has had a confirmed impact on the policy formulation which is depicted by the decisions of the Government of India in 1973, to nationalise the wholesale trade of wheat and subsequently following a year of intense debate and early reverse in the implementation of the policy, to abandon the course. Those decisions were on the lines of the well-known pattern of state intervention in the food grain trade has had along history of British times. For a number of decades compulsory procurement of grain, fixation of ceiling prices, zoning of surplus and deficit regions, movement control, fair price distribution, and statutory rationing of food grains etc. are being used as the tools of intervention. During the British period, the mobilisation of surpluses at non marketed prices was undertaken, admittedly for the maintenance of urban demand and with a view to a long-range development planning.[49]

3.7. Present Position In the democratic India also, the governments tried to keep away the indigenous banker cum trader from the main stream of development through the establishment of wide spread branch banking, development banking etc. Several schemes and programmes were drawn out to ease the burden of rural indebtedness and to regulate sale of commodities in the primary market. These efforts found their success and to a great extent, the rural sectors were released from the clutches of moneylenders. Surprisingly, the final decade of the century witnessed the regeneration of the usurers in the form of a new class of private bankers in the trade centres and cities of India. Today, it is estimated that they hold and control about half of the resources of the country and it is asserted that in India, there is a parallel economy sponsored by them.

3.8. Functioning of Intermediary Turned Indigenous Banker In India, the market intermediary cum indigenous banker was also a dealer and broker in capital. His main business was to lend money. Mostly, personal security of the producer was enough to get his financial help. Since some of the loans were normally for performing social functions or other unproductive purposes, he cared to take collateral securities to balance the amount of his loan. He sometimes deducts interest beforehand and pays the outstanding balance to the customer. He collects the debts in instalments. His rate of interest is often very high, ranging from 18 to 120 percent and he is so merciless in his exaction, that he has been termed the Indian "Shylock."[50] But there has been a marked fall in this rate of interest due to the competition of the co-operative credit societies and the increase in the economic stability and peaceful conditions of society under the democratic rule. But for the worthless security of the ryots, who may merely be tenants with no title to land and the difficulty of collecting the original sum loaned out which has also to be reckoned, the rate of interest would have been reduced to a lower level than existed. The financing of agriculture was largely dependent on the monsoons. As farming was a seasonal occupation, offering only half-time employment for the money supplied by the banker, he was forced to charge a high rate of interest, when it was employed. The same was the case with the shroff, who was forced to charge high rates in the bazaar during the busy season, when he has to earn enough profit to enable him to repay the deposits that lie idle n his hands during the slack season. Undoubtedly there has been a weakening of the position and he was able to prosper only in the limited area of his business. As the co-operative societies gathered strength and began to work successfully, the mahajan or the banniah were drawn into the vortex of the society. Later, he became the promoter of cooperatives and supplied the capital, since he found better security and no risk in it. The co-operation of the mahajan was to be enlisted on a wide scale, because he was the only educated person knowing something about banking and if his services were enrolled in the cause of the co-operative movement, it would have not only resulted in the elimination of a dangerous competitor and rival, but would have brought the service of his expert knowledge to a socially just cause. But the political nexus with the bureaucracy tried to keep them away from the co-operatives and made the cooperation a pasture of governments.

3.8.1. Contrast Between the Lending Policy of The Indigenous Bankers and the Strategy of the Commercial Joint-stock Bankers In the present rural economy of India, there are different types of persons or concerns engaged in financing and occupying the role of trader or intermediary. They include money lenders; indigenous bankers; commission agents; dalals or brokers; wholesalers; processing intermediaries etc. in the unorganised sector and commercial banks; credit and marketing societies; development banks; development and marketing organisations etc. in the organised sector. To understand the difference in approach and business practices between the organised and unorganised sectors, an analysis of the difference between money lenders and commercial banks will be useful. The primary difference between the moneylender and the indigenous bankers should be noted initially.

3.8.1.1. Sources of Funds Money lenders, as a principle never go for other's funds. Their source of funds include the savings of their family members or some close friends over and above own purse. They attempt to finance consumption loans also and charge higher rates of interest than the indigenous bankers who attract deposits, charge lower rates and grant loans for productive purposes alone. Whereas, the indigenous as well as the modern commercial banks accept deposits for deployment of the same in loans and investments.

3.8.1.2. Difference in Period for which Money is Lend As a principle, commercial banks cannot grant loans for long period and lock up their funds in unrealisable assets as they are using others' funds accepted in the form of deposits. They never forget that all the assets of a bank should be within the quick and easy control of the bank. But the indigenous moneylenders do not conform in their business to these principles. They lend money on every kind of security preferably land, real estate and jewellery. As most of the working capital is their own, they are not afraid of any run. But the mistake lies in the fact that they do not create any tangible instrument, which would enable them to pass it on to the commercial banks. The lack of such an instrument precludes or disqualifies them to act as an intermediary between the primary borrower and ultimate lender, viz., the joint-stock banks of the country side where they operate. Any liquid paper backed by the endorsement of the indigenous banker should comply with the joint-stock banks. By this method the indigenous banker could have easily become an indispensable link in the banking chain connecting the farm or the factory with the modern bank. Lack of adaptability and initiative must be the sole reasons of his short- sightedness in this respect.

3.8.1.3. Securing Loan The commercial banker weighs each debt by itself. Generally speaking he grants loans on sufficient collateral security placed in his hands and the indigenous moneylender balances good against bad debts. He distributes his risks among his various clients. When a higher and more tempting rate of interest is offered, he willingly hazards the risks, but of course, he has the prudence to take some kind of security. So, the necessity to write off bad debts is less urgent than in the case of the commercial banker and though the native banker does not lose his capital, as he gets it locked up in real estate or other properties. So, at least for some time, there is a temporary diminution in his working capital. The rural moneylender and the indigenous bankers do not understand that "the banker should be a livery stable keeper, who must keep his horse always ready for the hire." He should realise that "banks are made to make capital circulate and not lock it up" as P. Leroy Beauliau has said.[51]

3.8.1.4. Objective Behind Lending It is often stated sarcastically that the Indian moneylender's motive in granting loans is not a laudable one. It is the small moneylender who generally trades on the misfortune of his clients, pampering them with fresh loans, till they are over head and ears in debt.[52] The only way to rescue oneself from the moneylender' clutches is to bid farewell to the mortgaged property. The Moneylenders Acts are mere sedatives to the situation. The Usurious Loans Act of 1918, the Punjab Regulation of Accounts Act 1930, the Deccan Agriculturists' Relief Act of 1879 and 1907 and the Bengal Money Lender's Act of 1933, Land Alienation Acts and the Civil Procedure Code etc. have made the position of the usurious moneylender very unsafe and risky, as the uniform and praiseworthy tendency of all these Acts has been to afford legal protection to borrowers. It lead to the adoption of new features on the part of moneylenders, but it has not improved their fortunes in any way. The strengthening of their position would have been a better line of useful reform, for they are still an integral part of the real economy of our country. The education of the rural borrower is a better remedy and such educated (borrower) should borrow from real credit agencies. Moneylenders should have been allowed to join the co-operative societies or act as agents of organised joint-stock banks so that the "missing link" between the different money markets could have been provided. Censure cannot be extended to the village banker of the better class, who generally refuses to grant loan, if there is no proper credit behind the borrower. The above description applies to the low set of usurers who are rapidly springing up everywhere as the deceased products of a deceased society. They consider that money lending is the easiest way of adding to their capital.

3.8.1.5. Maintenance of Reserves The commercial banker will not allow his gold or cash reserve to remain permanently higher than what he considers necessary for the purposes of his business. To do so, would amount to neglecting his business aims and making profits. When the banker's reserve is in excess of his requirements he lowers the rate of discount, issues credit to a greater extent and see his reserve gradually reduce to that amount, below which, he considers it is unsafe to allow it to fall. Owing to the ebb and flow of his business, there may be at times, a superfluity of gold at the banks or the reserve may fall below the safety limit. But the guiding principle is that the reserves should be fully utilised. The indigenous banker on the other hand keeps no reserves and lays much importance on the rate of interest.

3.8.1.6. Taking Deposits and Creation of Credit The joint-stock banks are more borrowers than lenders. They attract "other's money" in the form of deposits, which they employ in granting loans and overdrafts. Even while discounting bills of exchange or making investments, the joint-stock banks gives the right to draw on them and this takes the shape of a book credit with them. The customer exercises this right by drawing a cheque to meet his tangible needs or may allow the amount to lie idle in his current account balance, in order to draw on it at a later date. Thus, in advanced societies, where banking is fully understood and practised, deposits arise in three ways: (a) by actual deposit of cash paid across the counter, (b) a bank loan makes a deposit, (c) the discounting of a bill of exchange or the making of an investment by the bank may lead to a deposit on the part of the bank. The loan of one bank may also become the deposit of another. Thus, the banker succeeds in making the members of the community lend their savings either willingly or unwillingly and it is with such borrowed resources that he conducts his banking business. This function is referred as creation of credit.

3.8.1.7. Position of Indigenous Bankers The rural indigenous bankers attract very little resources in the shape of deposits. This was partly due to the fact that the banking habit has not taken hold of the rural people yet. Nor do these people possess lucrative savings to be deposited elsewhere. He makes no attempt to attract deposits, but he certainly keeps the funds that poor people generally entrust to him for safe custody. Usually he pays a slightly higher rate than the current rate of interest that the savings bank of the joint-stock banks or cooperatives of his locality offer to pay. He also stands ready to honour the cheques with ready payment, in case of current accounts. So far as their fixed deposits are concerned, the depositors generally consider it a moral obligation not to embarrass the bankers, by making a call at any inconvenient time. The custom of paying fixed deposits before time whenever so required by the depositor might be seen in the case of the ordinary joint-stock bank, but not among village money lenders.

3.8.1.8. Approach to Deposits There were some indigenous bankers who in the beginning of their career took much care to attract deposits but as soon as they build up a safe and lucrative business, they no longer cared to burden themselves with the onerous duty of attracting deposits and accept a position to pay them at call. These people deem deposits more a cause of hindrance than aid as much so that it has been asserted that some of the indigenous bankers have advised their successors never to take up the irksome business of attracting deposits. The Chettiyar bankers of South India received current accounts as well as fixed deposits accounts. They paid promptly the cheques (hundies) issued by the customers and they adopted the practice of clearing cheques drawn on them.[53] Many Banks were also given access to the clearing facilities provided by the then Imperial Bank of India.

Again many of the shroffs, i.e., indigenous bankers of Central and North India preferred to receive deposits from friends but not from businessmen. They know that money from business people is liable to sudden, frequent and untimely calls. So the indigenous banker made it a policy on his part to not to advertise for deposits and attract them by paying a stipulated rate of interest agreed to at the beginning. Yet it would be quite wrong to assert that he did not made use of 'other's money.'

3.8.1.9. Sources of Funds To a very great extent the Moffusil banker depends for money on his own purse and if he was in need of money, he went to a fellow banker who lends him money at two to six per cent rate of interest. It was only in the last resort that they go to the joint-stock banks for additional funds. Some of them viewed with hostility the rise and progress of these institutions, but many of them had realised that they were a source of great help to them. Though, in one sense they were rivals, they confer tremendous advantages to the indigenous bankers. They rendered unnecessary his keeping of a large stock of silver rupees. They facilitated his remittances from place to place. It might pay him to deposit his idle cash and obtain the banker's deposit rates of interest. They helped him by discounting his hundis. The endorsement of the indigenous banker makes the hundi doubly strong and such this bill of exchange was a perfectly ideal security for the joint-stock banks to discount. Sometimes also a big line of overdraft was granted by the joint-stock banks which would aid him largely in all his operations. Thus the starting of more joint stock banks and the extension of their branches in the interior of the country and at the different agricultural centres directly benefited him. In many places the indigenous bankers were coming forward to help the starting of new joint-stock banks and extending branches of banking institutions. Undoubtedly it was in the interests of the country, that progress in this direction should have been accelerated. The Co-operative Banks afforded the best solution and if this movement were encouraged on proper lines the usual credit needs could have been supplied on more sympathetic lines than at present.[54]

3.8.1.10. Social Reasons The deficiency of the banking habit cannot be attributed to the indifference and apathy of the indigenous banker towards the deposits of the people. Nor is the want of security in the past the sole cause for the absence of the banking habit. The absence of savings banks or other institutions to store up savings, the frequent occurrence of famine and the poverty of the people must have retarded the actual growth of capital in India. The absence of a well-secured paper currency commanding the confidence of the community must also be held responsible for the absence of the banking habit.

3.8.1.11. Non-credit Functions The private banker and the small moneylender generally combine business with trade and shop-keeping or hold land and do commission business and very often in order to get rich quick they speculate heavily in all kinds of produce. They do mortgaging business that often involves them in litigation.

3.8.1.12. Speculation The indigenous banker especially the shroff speculated in Government paper during the off-season but very rarely held it or lends money on it. Some of the most desperate gamblers in the market of speculation were found among the native bankers of Western India. Their hard businesslike qualities are thus grossly alleged to be misused and the community believed that it received no benefit out of their business energy. These traders, bankers and commission agents cannot be considered as modern bankers. But it would be interesting to probe into their activities, since; their acts rendered some sort of an assurance of market to many primary products.

3.8.1.13. Bill-Broking It was the shroff's business which consists of bill-broking business and in addition to it lending and borrowing on a large scale that can be reckoned at the nearest possible approximation to modern banking business. His position can be likened to that of the bill and acceptance houses in the London money market. His main business was the hall-marking of bills for purpose of currency and getting the same discounted or rediscounted at the hands of the joint-stock banks and the Central Bank of Issue. Rediscounting was a cheaper source of financing his operations but there was no reason for depriving him of the privilege of attracting deposits that he was holding in the money market. It is stated that this forced him to charge a higher rate for discounting hundis in the busy season when he found work and as he was saddled with heavier deposits attracted at a high competitive rate. He was forced to pass it on to the clients in the shape of high discount rate he charges during the days of employment. Joint stock banks felt the pressure of this competition and it was suggested that it would be better to deprive the shroff of this privilege of attracting deposits and compensate him by giving greater rediscounting facilities.

3.8.1.14. Commission Agency At Kanpur the native bankers or the moneylenders were trading in money, cotton, grain, flour, and other articles. Some of them managed the sugar and the flour mills. At Delhi the indigenous banker financed the goldsmiths and skilled workers. The bankers of the East adhered to the practices of the guild that were comparatively neglected by the great moneylenders of Europe and counts jewels among their means of trade and not as objects or ornaments to be kept in their safe. He made systematic advances to the goldsmiths and sold the finished product himself. He tried to efface the maker of the goods he sells and posed as the genuine producer. Thus he appeared to be both a jeweller and a banker. In Bombay the Marwari bankers dealt with cotton seeds and shares and did much speculation in the value of these things.[55] The export promoters and commission agents of erstwhile Travancore port of Alleppey conducted "Satta", a type of speculative forward sales and funded the producers. The Natukottai Chettis of Madras who invested their capital in Burma and who developed the indigenous banking system of Burma financed agriculture on a large scale and promoted habits of thrift and economy by the insistence of prompt repayment of both principal as well as interest. This combination of trade with banking business became indispensable on the part of the rural indigenous banker of this country. Full-time utilisation of their money as well as energy would have otherwise become impossible.

3.8.1.15. Hazards of Mixed Banking In several other countries also, the private bankers did not subject themselves to any official regulations to pursue an elementary form of banking business, in addition to other and more lucrative forms of business. But, the main defect of this kind of business was that the depositors of the private banker stand to lose their money, if the private banker suffers on account of his outside activities.

3.8.1.16. Present Position of Mixed Banking In spite of this disadvantage attendant on private bankers' mixed banking, we find that in almost all countries country banking is admittedly of a mixed nature. Before their organisation is discussed, it is convenient to summarise their functions under lending money or cash credit, receiving deposits, discounting bills, financing small-scale industries and agriculture and, internal trade of country. They do not finance large-scale industries or foreign trade of the country. A few of them act as Government Treasurer[73] and disbursing agents of Railways and the Native States.

3.8.1.17. Organisation and Management of Business Some of the bigger indigenous bankers had their own caste men employed as agents at all the important trade centres of the interior. The agents or "Gumasthas" were often changed from centre to centre to enable them to understand the local conditions of these several places. When once the agent was made permanent he served his employer the whole of his lifetime and devoted the whole of his energy to the success of his firm. Although the pay given generally ranged from Rs. 30 to Rs. 50 a month dishonesty on the part of these officials even during days of economic pressure and rising standard of living was of rare occurrence. These agents sent weekly accounts of their work to their head office and occasionally received instructions from the command centre. Their books and accounts were written in the local vernaculars of the country and the indigenous banker himself carefully audited them. This efficient and economically conducted personal supervision prevented fraud on the part of the officials and it also gave a close mastery of facts and figures relating to this business. But acting independently with no sort of teamwork amongst themselves they were unable to withstand the competition of the joint-stock banks, the co-operative banks and the Exchange Banks. Later, the government, the law and the public opinion went against them.

3.8.1.18. Their Public Spirit Every year on the "Depavali" day, the Marwari and Gujarati bankers worshipped their books and distributed alms to the deserving people on that particular day on a most lavish scale. The Brahmins were fed with sweetmeats and other delicious dishes and given a hand 'Dakshina' or present on this New Year's Day for them. Some new account books were placed on the same pedestal as the goddess "Lakshmi" and worshipped. Some of the indigenous bankers set aside a small moiety of their gains in a small charity box on each and every profitable business. In the big cities where a number of these bankers transact business, these gains were pooled and their general association determined the best manner in which it was to be spent. They were well aware of the old adage which says, 'Charity begins at home' but are not forgetful of the saving clause that "it does not end there"

3.8.1.19. Indigenous Bankers' Association In all the big commercial centres of modern India, where a number of these indigenous bankers transacted business, they formed associations to protect their mutual interests, decide financial claims and arbitrate on social disputes even. Their spirit of social co-operation, their sense of mutual economic interest and the high degree of mutual trust was so great that they submitted all their commercial disputes to their arbitration courts and their decisions were virtually carried out, thus, resulting in great organic and functional solidarity. It also tended "towards the development of commercial law in the country on a strictly democratic and ethical basis".[56]

3.8.1.20. Policy of Developed Nations The bill brokers of the London Money Market were used to attract funds by paying a slightly higher rate, viz., 1.25 % more than what the joint-stock banks pay their depositors. This fund formed the nucleus out of which they accrued the needed finance for their bill-purchasing operations. They constantly borrowed money at a low rate from the commercial banks to carry out stock-in-trade. Similarly, the shroff's business should have been of dealing, buying and selling bills and hundis, with the help of borrowed funds in the shape of deposits. The joint-stock banks should have pursued a more vigorous policy in the matter of attracting deposits. This would have solved the problem of stabilising the rate of discount all the year and reducing it to a lower rate, through providing larger resources for discounting or rediscounting. During those days, there were very few agencies who could buy the bank acceptances. Hence, a bill market was not created in this country as it was done in the USA. within a short span of thirteen years of their planned growth.

3.8.1.21. We should have a Policy on Local Bills Although Shroff had to pay heavily for any failure of the bills he had rediscounted, he preferred to run the risk, for unless there was a big turnover of bills through his hands, he would not had earned much profit than what he could get with the greater resources he attracted as deposits. Again, if bills were drawn for a longer period than three months, the bill broker must have ready funds to enable him to sit tight, till the bill comes within the period of time, for which the banker would discount. It was not compulsory that the whole of the capital and deposits should be employed in the form of discounting, but a considerable part of his business should have been in this direction.

3.8.1.22. The End of the Elastic System of Rural Credit The quadruple role played by the indigenous bankers, especially the rural bankers and the smaller moneylenders in our economy is noteworthy. They were the purchasers of the rural produce and sometimes, the local agents of the European mercantile firms, the wholesalers, village shopkeepers and moneylenders. Thus, the more general practice was that the indigenous moneylenders and middlemen, who were styled bankers, as soon as they attain a decent stage of opulence and wealth, have brought the real sedate and pains taking bankers like the shroffs into great disrepute. By the concentrating of too many jobs, or as the old saw says " too many irons in the fire," such as banking, agency, commission, brokerage and middlemen's profits, most of them failed to develop into modern bankers. Besides acting as an intermediary and accountant as the western joint-stock bankers do, the indigenous moneylenders miscalled bankers, generally wished to take unfair advantage of their business habits, greed for gain, education, wealth and social position.[57] The ignorant, short-sighted, extravagantly minded and long-suffering agriculturists too often fall a prey to the crafty moneylender. The main problem here was to reduce the high rates of interest, which range from 30 to 100 % and deprive the moneylenders or the low set of usurers of their power to squeeze the improvident, helpless borrowers. Moneylending for productive purposes, to solvent borrowers is indispensable in the economic organisation of any society. Timely, seasonal and regular lending of financial resources, at low rates by sympathetic agents to needy agriculturists or industrialists is an essential element in economic growth.

3.8.1.23. What went Wrong? Much improvement cannot be vitiated in rural economic organisation, so long as the commercial banks that displaced the moneylenders grant loans for unproductive purposes to the improvident borrowers. One school of opinion wishes to exonerate the Indian agriculturists from the charge of improvidence. The advocates of this school pointed out that the indebtedness of the Indian peasant is generally of a cumulative character. Secondly, about 50 percent of the money is borrowed for agricultural purposes, i.e., improvement of land and purchase of livestock. Although, there was much truth in this remark, lack of foresight and knowledge made them incur improvident expenditure. Wasteful social expenditure on religious and family ceremonies, like social customs, seasonal feasts and caste dinners lead to lavish spending quite out of proportion to the actual income. Unaware of the utility of keeping family budgets, these ignorant peasantry contracted debts, which they found impossible to repay. Even during days of prosperity, the previously contracted debts were not extinguished. This gradually led to more stringent situations of grave indebtedness and social harassment.

3.9. Other Quasi-Banking Institutions The other indigenous classes of institutions included the kury-chitty and the nidhis of Madras, who have been performing money lending business since 1850.[58]

3.9.1. Kury-Chitty In the kury-chitty system, a certain number of subscribers unite to put some specified sums in identical instalments, equal to their strength. The whole sum is drawn in corresponding periodical lots and the previous winner is excluded. This process is continued till all subscribers have received their lots once. The sum is repaid through the regular payment of instalments. The chance of winning an earlier lot is open to all the subscribers. There is a second form of chitty called 'lela-chitty' In this modified form of kury-chitty, the subscribers who are in urgent need of funds can take part in a bid, where the subscriber offering the highest discount will get the sum in the turn. The discount so received will be adjusted towards the instalments of the other subscribers. This rebate in instalment amount is the 'veethappalisha', the return to the subscribers in lieu of interest. The Government of the Native State of Travancore did well in embodying the legislation with reference to these provident funds and benefit funds in a clear and concise form. Today, Chit funds are popular all over India. The endeavour ought to have been in the direction of developing chit funds into village banks, encouraging the deposit habit on the part of the rural population. The linking of these with the co-operative banks or the organised money markets has prevented the unproductive investing of the chit funds in land or jewellery.

3.9.2. Nidhis The nidhis originated in or about the year 1850. The etymological meaning of the word nidhi is treasure. These are associations for mutual credit funds registered under the Indian Companies Act. The main object with which they were started was to facilitate savings, relieve members from old debts and grant loans for all purposes on good security. Outsiders were also given loans at a higher rate of interest. Generally, there were two kinds of nidhis, viz., permanent and temporary. Although these societies were started at about the same period as the co-operative societies in Germany, they have had no such brilliant career as the latter. This is partly due to the fact that frauds were committed at the early stage of their existence. Want of supervision must have had its effect. Even now there are no proper outside control. Prior to 1872 the loan funds or nidhis were not registered under the Indian Companies Act and had to be wound up involving a loss of 20 lakhs. Since 1872 they were started in increasing numbers and 269 nidhis failed during the years 1872-92. In March, 1929, there were roughly 228 nidhis in the Madras Presidency. Madras, Tanjaore, Madura, Coimbatore and Chengalput have a large number of them. Arising from that of an independent audit, there was no publication of balance sheet. The charging of the same rate of interest given to depositors on loans also led to uneconomic results. The method of monthly instalments and the paying of them with clock like regularity consequently proved unsuitable to the agricultural population. In spite of these defects these nidhis flourished, says the Banking Bluebook, but no statistics of their number, capital and shareholders are available. Religious and local agencies were running this type of investment houses.

3.10. Merits of these Indigenous Funds Sir Frederick Nicholson who made a special study of the agricultural problem of Madras during the last decade of the l9th century comments on the good features of the nidhi system as: "They are the introduction of co-operative principles and habits, the stimulation of thrift and providence, the creation of business habits and punctuality, the cheapening of credit, the insuring so long as rules are observed that the members will, if non-borrowers get back their, money with interest , and if borrowers they are secured from all annoyance so long as they pay their dues punctually. Business is extended by cheapening loans and not by entrapping the unwary and ignorant. Profits are to be sought by the development of cheap credit and not by squeezing the individual debtor. Small savings are cared for and petty capital retained in the neighbourhood."[59]

3.11. Defects of the System It is apparent that the nidhi was a good institution for encouraging thrift. So long as they were soundly managed, they worked well, but owing to growth or indifference the management went into bad hands. The system has been perfected more or less and was not capable of any further extension by selfless public workers. Besides, they were mere moneylending societies lacking the fundamental concepts of banking. Their utilities were not enhanced because of the lack of a uniform Act governing the practices of the various kinds of nidhis by the legislature of the country. "There is no concentration of idle hoards for productive purpose," as Sir Frederick Nicholson puts it. The Co-operative Credit Societies fulfilled these duties more worthily. The nidhis were forced to fell to the background. The Madras Banking Enquiry Committee pointed out "that they have a working capital of four crores and that the nidhis lend on share capital to 90 per cent of the paid-up share capital, to 90 per cent of deposits, to 50 per cent of the value of jewels and 80 per cent of the value of gold ornaments, to 75 per cent of the value of goods stored in godowns and to 90 per cent of the value of Government paper. They lend at a low rate of 6.25%, but fines are levied on overdue."[60]

3.11. Extent of Rural Indebtedness by the Indigenous Bankers India has been a predominant agricultural economy, and the rural sector was in a very poor condition and majority of the average farmers in India were not far away from utter poverty. The presence of crushing indebtedness is universally admitted to be one of the major causes of this state of bad affairs. "The country is in the grip of the Mahajan. It is the bounds of debts that shackle agriculture. The existence of huge volume of unproductive debt, which prevents improvements in any direction, constitutes one of the most serious problems of the Indian agricultural economy" [51]

3.11.1. Nature and Extent of Debt It is estimated that only 35% of the total rural debt is creative; 42% unproductive and 23% useful but unproductive. The most serious consequence of this heavy indebtedness has been the rapid fall of land using cultivators. In 1931 there were about 5 million ryotwari cultivators paying land revenue of Rs. 100 and below. In I946 their number was reduced to 3.5 million. 1875 The Deccan Riots Commission came to the conclusion that 23% of the occupants were under debt and the average debt pet head was Rs. 371 for Bombay. Sir Mac Legan estimated Rs. 300 crores as total agricultural debt in 1911 for British India. In 1925 Darling put the figure at Rs. 600 crores. According to the Central Banking Enquiry Committee the figure was 900 crores in 1911. In 1937 the Reserve Bank of India estimated indebtedness as Rs. 18,000 crores. According to the Reserve Bank, during the Second World War, because of the high price of farm produce; the agricultural debtors were enabled to pay off their debts either out of the increased income or by the sale of a part of their land. Partly this was true but only of the big zamindars. The ordinary, farmers have actually suffered from the inflation. Moreover, since 1944 the indebtedness has been again mounting. "The seriousness of the debt lies neither in its volume nor in its rate of growth but in the fact that the greater part of debts consists of unproductive debt."[62]

3.11.2. Causes of Rural indebtedness The basic reasons leading to wide spread borrowing by rural population may be summarised as follows. This review is essential to understand why they go for debts from indigenous sources rather than the credit institutions of the organised money market.

1. **Better Position to Borrow** The rights of the land-holders have been really ascertained as a result of land settlement policy of the Government and consequent upon the various improvements, the value of land increased taking

the form of a collateral security. The farmer's credit was more definite and of greater value. He was in better position to borrow and because of ignorance and extravagance; he could borrow the maximum that he could. Since the inception of planning and the consequent village development schemes, there have been more facilities for them to borrow from the banks. The debt relinquishing and relaxing policies of the Government during the late 70s provided much impetus on their unwarranted borrowing.

2. **Farmer's increased Credit** The farmer's credit increased due to rise in agricultural prices, rents and land values. Thus, in turn, was the result of stable rule, the new transport and the growth of towns. British Law also gave the peasant the rights of absolute ownership and free transfer of land.

3. **Unremunerative Farming** The excessive pressure of population on the land and the consequent subdivision and fragmentation of land, the decay of cottage-industries and the lack of subsidiary occupations to supplement farm income; the ill-health and inefficiency of the farmers; the insecurity of the crops and the loss of cattle through famine and disease- all these made farming unremunerative. The peasant, therefore, was forced to borrow.

4. **Heaviness of Land Revenue** According to R.C. Dutt the heaviness of land revenue with the rigidity of its collection was one of the causes of rural indebtedness. Even in periods of famines and depression there was little or no remission of land revenue.

5. **Increased Standard of Living** As a part of the general growth of the society there have been changes in the standard of living of the peasant. There was a general rise in the standard of living of the farmers without corresponding increase in their purchasing powers. Hence they resorted to borrowing.

6. **Conditions Necessary to Induce the Moneylenders to Lend** The establishment of a strong centralised rule and a judicial system by the British created the condition necessary to induce the moneylenders to give loans against proper security and get high rates of interest. Moneylenders could get the debtors arrested to get their properties attached. Earlier it was not customary for the

creditor to seize the land of his debtor. But with the steady rise in land values and with the facilities available for the transfer of land, it became profitable and easy for the moneylender to lend and realise.

7. **Inconvenience of Taking Loans From Institutions** It is very difficult to get loans from financial institutions, because the farmer has to fill up many types of forms and to fulfil a good many formalities, which are not necessary in case of loans from mahajans.

8. **Improvident Expenditure** Another basic cause of rural indebtedness, as discussed earlier, was traditional social expenses on wedding, deaths, dinners etc. The peasants had also to borrow for cultivation expenses and even for domestic expenses, which went up during times of temporary prosperity and remained high and unpaid in bad times.

9. **Ancestral Debts** It may also be pointed out that the debts were mostly inherited. As it is said the Indian farmer is born in debt, lives in debt and dies in debt, leaving behind debt.

10. **Questionable Practices of Moneylenders** To all these may be added the questionable and unethical practices of the moneylenders. The moneylenders followed many dubious practices like deducting interest in advance, getting gifts for doing business, taking of thumb impression on blank paper and using it for fraudulent practices etc. There are many instances of manipulating accounts, executing documents for larger sums than those actually given, taking of conditional sale deed, etc. The rate of interest charged by the moneylender was also very high.

11. **Lack of Marketing Infrastructure and Failure in Redeeming Fair Price for Produce** The rural productive sectors are prone to the risk of being exploited by usurious merchants who never offer a fair price to the farmers' produce. With the withdrawal of middlemen, it has become almost impossible to sell their produce. This phenomenon has lead to abandonment of land and rural occupations leading to heavy indebtedness.

3.11.3. Government Policy, Regarding Rural Indebtedness Taking the question of prevalent and mounting debt situation of the rural producers and artisans, the Government of India took up many administrative and corrective measures. Some of the major efforts in this direction were

3.11.3.1. Measures to Avoid Unnecessary Debts It was felt that the best way of relieving rural indebtedness was not by enlarging the means of credit but rather by accompanying every increase of credit by an attempt to educate masses in thrift and mutual control. Otherwise, the more money they could get, the greater would be the expenditure by the farmers on their customary extravagance. Hence, the greatest need has been on controlling credit. It was also necessary to enable the farmers to take a more business-like view of their indebtedness and to face the moneylender on a more equal threshold. Suspension of land revenue during days of scarcity and the starting of village post-office savings banks to promote thrift have gone some way in avoiding necessary debt.

3.11.3.2. Improvement in Civil Law To shield the farmer, many alternations were made in the civil laws in the matter of executing the decree against farmers. The implements, cattle and materials of the agriculturist's household were exempted from attachment or sale. The farmer was exempted from arrest and a decree of the court was given for commission of the repayment of his debt.

3.11.3.2.1. The Deccan Agriculturists Relief Act, 1879 It permitted the courts to go behind the contract and change it in favour of the farmers so as to reduce interest rate, to prevent the sale of land unless specifically pledged and to restore the land to the farmer even when there was a sale-deed between farmer and the moneylender. The Act made it obligatory on the moneylenders to show accounts and has been found positively injurious. It led to abuse of concessions on the part of farmers. Enhanced litigation made the moneylenders more guarded and resulted in the decline of rural credit. According to the Famine Commission (1901) the more frequent transfer of property had followed the Act by both sale and mortgage. The Bombay Banking Enquiry Committee recommended its repeal and being replaced by a new Act containing a few provisions to safeguard the interest of only small and actual farmers.

3.11.3.2.2. The Usurious Loans Act, 1918 As amended in 1926, it restrained the extortion of moneylenders, by fixing the maximum rate of interest and by enabling the mortgagor to insist on his right of redemption. The Royal Commission on Indian agriculture held that the Act was practically a 'dead letter' But the Central Banking Enquiry Committee supposed that the Act was capable of being worked to the advantage of farmers and should be retained.

3.11.3.2.3. A Simpler System of insolvency There was an increasing public opinion in favour of a simpler system of insolvency and it received the support of high authorities such as the Royal Commission of Indian Agriculture, the Civil Justice Committee and the Madras Committee on Co-operation, 1940. The Bombay Agriculture Debtors' Relief Act, 1947, empowered the courts to declare the debtors insolvent, if their assets were such that liquidation of the debt in instalments was not possible.

3.11.3.2.4. Legislation Regarding the Licensing and Control of Money lenders The Punjab Regulation of Accounts Act, 1930, obliged all persons whether moneylenders or shopkeepers who advance loans in money or in kind at interest, to keep an account for each debtor and to supply him every six months a signed statement of the account of principal and interest and detailing all the loan transactions of the past six months. If a separate account was not kept for a debtor, the creditor on suing him was liable to loose his interest and was not to be awarded his costs. The Royal Commission on Indian Agriculture as well as the

Central Banking Enquiry Committee appreciated the principle underlying this Act. A similar Act was to furnish a statement of accounts to his debtor only if the latter asked for it. The Bihar Moneylenders Act required all moneylenders to register themselves. The Bombay Moneylenders Bill, 1938 required to regulate money lending in a more thorough going manner. But this Bill did not become Law. In 1931 the Punjab passed the Regulation of Moneylenders Act. United Provinces, Orissa and Bengal enacted legislation in 1939 towards the same end. These Acts provided for the registration of money lenders regulation of accounts, limitation of the rates of interest and other miscellaneous aspects

3.11.3.2.5. Measures for Restricting the Alienation of Land The Famine Commission stated that the increase of debts was due to the full power of alienation to prevent further indebtedness. As a result, the Punjab Land Alienation Act, 1960 was passed. For the purpose of this Act, the population of the Punjab was classified under groups known as farm tribes. A member of the non-farming tribes was not permitted to obtain land from a farmer. He could not take a mortgage for more than twenty years. Transactions between members of the farm tribes were not affected by the Act. The Act, while successful in preventing the exploitation of the peasant proprietor by the moneylender, retarded the flow into agriculture of enlightened outside enterprise and led to contraction of credit and the appearance of the render and the agricultural moneylender. In 1903 Bundelkhund Land Alienation Act passed to restrict the right to transfer land. Similar restrictions were imposed on the alienation of land by aboriginal tribes in Central Province and Bombay.

3.11.3.2.6. Debt Conciliation and Liquidation Granting of some immediate relief to the farmers from their indebtedness became a serious problem during the 1930's because of the heavy fall in the price of farm products. Debt Conciliation Acts were passed in Central Province and Bihar in 1933 and soon in other provinces.

In 1936, Madras passed the Madras Debt Conciliation Act. Some native States like Travancore, Cochin and Mysore also passed many laws. It must be noted that Conciliation Boards have had no coercive power to force agreement. Under the Madras Act, if the creditor did not agree the debtor was given a certificate, which relieved him from paying the expanses of a civil suit, if the creditor went to the Court. The creditor could not get more than 60% interest after conciliation had failed. In 1938 Madras passed the Debt Relief Act providing for the compulsory sealing down of debts. The Central Provinces and Berar Relief of Indebtedness Act, 1939 introduced compulsory methods of lowering down the debts. The Bombay Agricultural Debtors' Relief Act, 1939 was put into force 1941 as an experimental measure. This Act also provided for the compulsory reducing of agricultural debts. The U.P. Agriculturists Debt Redemption Act; 1939 was also passed with the object of effectively scaling down the debt.

3.11.3.3. Organised Supply of Credit As a part of the debt relief measures, the Government implemented various schemes also. They are

3.11.3.3.1. Taccavi Loans Taccavi loans were granted to farmers under the Land Improvement Act (1883) providing for the grant of long-term loans for permanent improvements on land such as well and embankments, etc., and under the Agriculturists' Loans Act (1884) providing for short-term loans for current agricultural needs such as the purchase of seeds, cattle, manure, implements, etc. A fundamental defect of the Land Improvement Act was that no loan could be given under it for the redemption of old debts or consolidation of holdings. Under the amendment Acts passed Madras (1935) and U.P. (1934) loans could be given in these provinces for the redemption of old debts. As a general means of financing agriculture the system was a failure. The Sub-Committee appointed in 1944 under the chairmanship of Prof. Gadgil, in accordance with the recommendation of the Policy Committee on Agriculture, Forestry and Fisheries, to report on the ways in which indebtedness could be scaled down and finance both long-term and short-term provided, made detailed recommendations. The recommendations covered adjustment, reduction and compounding of old debts, mode and extent of State finance in normal times, cooperative movement, private financial agencies and their regulation and rehabilitation.

3.11.3.3.2. Supply of Controlled Credit The Mac lagan Committee, Agricultural Credit Department of Reserve Bank of India and the Madras Committee on Co-operation were unanimous in their opinion that, further credit in the rural sector should be controlled. In their opinion, to extricate the farmer, without guarding against a relapse into debt would be a sheer waste of effort. The only effective means of controlling the debt is to fortify the farmer against future debt. Increasing farm income with the help of more efficient methods of production backed by better marketing facilities and by reducing the expenditure and increasing thrift can attain this. They also suggested that a system of controlled credit can do a great deal in this direction. Co-operative movement is capable of relieving the peasant of existing debts as well as in preventing future debt. The Royal Commission on Indian Agricultural remarked, "We have no hesitation in recording our belief that the great hope for the salvation of the rural masses from their crushing burden of debts rests in the growth and spread of a healthy and well-organised co-operative movement based on a careful education and systematic training of the villagers themselves."[64]

However, this protection was not of much use, because the ignorant and illiterate farmers were no capable of understanding the provisions of these legislation. Nor have the money to go to the court of law for protection. Further, the social status of the borrowers was much lower than that of the moneylender. Hence, most of the borrowers were afraid to challenge the moneylenders in courts of law. Therefore, the provisions set down in law remained on paper.

3.11.3.3.3. Development of Alternative Markets and Provision for Infrastructure Along with the measures to ease and release the rural indebtedness, it was necessary to provide necessary market infrastructure to assure a fair price for all commodities produced by the farmer. The Government as a part of promotion of Co-operative movement, tried to establish as many marketing societies as possible in rural areas. Many apex marketing federations were also organised under central control like State Trading Corporation, Regional processing and marketing centres etc. Still, the primary sectors like farming, handicraft, fishing etc. suffer due to the lack of steady and reliable market.

Thus we can see that the problem of rural indebtedness is twined together with many issues and of which lack of marketing infrastructure is creating a big base for ever increasing indebtedness. It is in this context, that the question of understanding the role of market intermediaries becomes multifaceted.

3.12. Evil Effects of Debts by Indigenous Bankers

1. A major fraction of income of producers goes in repaying dues and so their standard of living is very low.
2. It causes moral humiliation of producers, as they rely on intermediaries and thus they become negligent.
3. It encourages economic slavery and this is why there is unemployment in India.
4. The producer has to sell his land for repaying the loans and they become landless workers.
5. It creates class conflicts between the producers and the financiers.
6. Further development is not possible and permanent improvements are unlikely on lands.
7 It creates psychological disequilibrium and the producer is frustrated for not repaying the loans.
8. The producers is forced to sell his produce to financier at lesser rates and he is incapable to get a fair price
9. The national income also goes down with the reduction of farmers' income.

Thus, from the above discussion, it is clear that the financing market intermediaries played a pivotal role in the economy of ancient India. But the Colonial rule side lined these indigenous financiers to establish their organised houses and to control the economy of India. The usurping practices of these financier cum traders invited hostility in independent India also. However despite all the criticism against them and the efforts to replace them, they continue to play a very important role in the traditional sectors.

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CHAPTER 4

TRADITIONAL MARINE FISHERIES - AN OVERVIEW

This chapter elucidates the present position of the traditional fisheries of Kerala with particular reference to Alappuzha district. The study gives a description of the technological status and the economic performance of various tackles and crafts.

4.1. Fisheries Sector Fishing is one of the oldest occupations of mankind. Even today, it is the key income-earning sector of many maritime countries, both developed and developing. Fishing provides not only occupation to enormous people, but is also a rich provider of immense food and related resources. The importance and the social status of marine fishing has been described by the National Commission on Agriculture[1] in the following words "Sea fishing has been an occupation of the coastal people of India from time immemorial forming an integral part of the community's maritime heritage. Fishing operations have however largely maintained near the shores, venturing out into the open sea only a few kilometres from the base up to distances, which could easily be covered by sailing craft. The occupation of fishing in general was considered low in society and this, coupled with the prohibition of travel on the sea, commonly referred as Kala Pani, prevented the induction into it of capital and organisation from more resourceful communities. As such, solely the traditional community of fishermen developed the industry for centuries. Prior to Independence, fisheries which in the maritime states had reached considerable proportions, was viewed principally as a source of revenue, and barring notable exceptions like the erstwhile Madras Province, hardly received any encouragement from the government towards development. Considering the circumstances under which the community of marine fishermen had evolved different techniques of fishing, built various types of crafts and gear and successfully applied indigenous methods of preservation, it can be stated that the industry had reached a high degree of viability by the time of Independence. By comparison with the contemporary status of marine fishing in industrially advanced countries, However, India's Progress was tardy".

The National Planning Committee, during the discussions for evolving growth strategies in this sector, in 1948, described the traditional fishing sector as "Largely of primitive character, carried on by ignorant and ill-equipped fishermen. Their techniques are rudimentary, their capital equipment slight, their tackle elementary, and inefficient".[2] These explanations are broad enough to sketch an elementary picture of the traditional fishing sector in India.

4.1.1. Social Status of Fisheries For centuries, the marine fisheries sector was viewed as an occupation of people belonging to backward classes of the society, though it was the prime activity of people of maritime states around the globe. Even in developed nations, the social and economic rank of traditional fishermen has been backward. Very recent studies conducted by the Peer Team under the Decentralised planning Experiment of Kerala, the Peoples Plan Campaign, the traditional fisheries sector was identified as one among the three 'islands of poverty' in the state.

4.1.2. Marine Fisheries Marine fishery is considered an open access resource i.e., a store which is nobody's possessions and hence, is freely accessible to anybody who wants to exploit it [3]. This has made it difficult to manage the resource, because in the absence of property rights it is not possible to regulate and coordinate its use and exclude the free riders. Recently, many countries have evolved strategies to reserve the right of fishing through many regulations. Declaration of EEZ (Exclusive Economic Zone) gives the nations powers to prevent free raiders; there are statutory provisions to reserve different maritime zones for different types of crafts; certain regions are also been notified as leased zones, for pisciculture purposes etc. However, In India, the Marine Capture Fisheries continues to be everybody's property.

4.1.2.1. Features of Traditional Fisheries An economic preview of the traditional sector can provide a more clear idea to understand distinctions with the modern sector. This division is largely of subsistence nature in the economy. The traditional economy is characterised in many countries to a larger or lesser degree, the following three principal features.

1. Lack of specialisation Each and every one does all the jobs of producing a commodity, rather than doing or specialising a part of it.
2. Production is not normally or primarily undertaken for sale The primary object of production is to create supplies for self-consumption and not the creation of surplus for the market. No doubt there is some surplus that goes for exchange, but this is of marginal significance.
3. The technology is stationary With the rigid methods of production, the productivity tends to remain at the same level over long periods, which is just the necessary minimum, for subsistence living.

These three features are, in fact, the different facets of the reality of backwardness, and are interrelated. The first one hinders the division of labour and therefore, skill and output. The second one partly flows from the first, as the surplus of sale cannot emerge with output expansion handicapped by lack of specialisation. In its turn it limits the extent to which specialisation can be carried out. It also sets limits to the improvements in the methods of production.

4.1.2.2. Features of Modern Sector On the other hand, the modern sector is essentially an exchange sector of the economy. It is characterised by output surpluses meant for sale and is set up on capitalist lines. It exhibits the following three features. One is the use of reproducible capital like machines, buildings etc. It marks the dependence more on man-made capital, rather than on land or natural resources. Second, is the existence of wage-labour. The workers are not owners of capital-equipment. They only sell their labour for which they get wages as remuneration. Third, is the profit making that provides the motivation for the entrepreneurs who undertake production in this sector [5].

4.1.2.3. Distinctive Features Thus, the distinction between the two sectors relates to output, exchange and techniques of production. Obviously, therefore there is clash between the social spirit that has in the past given rise to and sustained the traditional sector, and the modern sector which has new relations, new work ethos and new morality of the market, where every thing has a price. This results inevitably in tensions that increase as the modern sector expands and intrudes in to the traditional sector.

In short, the distinguishing characteristics of the traditional sector may be summarised as follows.

1. Subsistence nature.
2. Heavy dependence on land and other natural resources.
3. Low capital input and slight equipment.
4. Elementary or outdated technology.
5. Labour intensive and very low productivity.
6. Localised nature and alienation from urban markets.
7 Low bargaining power.
8. Common ownership of means of production.
9. Economy based on religion, caste, tradition and beliefs.
10. Lack of specialisation

Adam Smith has pointed out one basic distinguishing feature of the traditional fishing sector in his book "An enquiry in to the nature and causes of the wealth of nations" to be the absence of rent as an element of prices. in the price of sea fish, for example one part pays the labour of the fishermen and the other for profits of the capital employed in the fishery. Rent very seldom makes any part of it, though it does sometimes" [4]

4.1.2.4. Description of Present day Traditional Fisheries The present situation of traditional fishing sector is almost beyond this explanation. Most of the discussed adjectives cannot be attributed to the present day traditional sector. The economic situation of the sector is neither that of the traditional, nor that of the modern.

This is because of the following features:

1. The production of the sector is market oriented and essentially not of subsistence nature. But, it cannot produce those species that are demanded by the market, since the physical properties like heat, current, weather and other biological factors of the fished water will decide the type and quantity of fish available. Therefore, production for market is almost out of the reach of fishermen. But they use technologies and methods for trapping fish varieties of attraction and value.

2. Though fisheries at large is totally dependent on land and nature, they are using most modern technologies like fish finder, out board engines, synthetic gear, tackles etc., requiring heavy capital investment.

3. Though, formerly the sector was labour intensive, the introduction of modern gadgets and machines like OBEs for propulsion, winches to draw net etc., has reduced manual labour considerably.

4. Today, the traditional fishing groups are specialised. There are different craft and gear combinations, dedicated for different species, fishing grounds and zones. However, the primary principles of the modern sector like division of labour, man management etc. are not fully applied.

5. Though the system of wage labour and incentive schemes are not applicable like the modern factory sector, an exceptional system of sharing of income is prevalent in this sector, which is in no way less scientific.

6. Today, the target market of traditional fisheries is not the local market alone. Most of the products are meant for foreign markets. However, the existence of a chain of market intermediaries can be considered an odd feature.

7 The traditional fishermen are price takers and not price makers. The lack of bargaining power is the basic and most characteristic element of this economy and the principal aspect to call this sector traditional.

8. Though, during the early days of motorisation, there was some kind of feudal ownership based on the concepts of profit or rent in this sector, today, the popular form of organisation is that of collective ownership and income sharing. However,

it is difficult to categorise the investment in crafts in to ownership capital and creditship capital as applicable to other sectors.

4.2. Indian Fisheries

4.2.1. A Brief Retrospect Before independence, in India, the marine fisheries production was of subsistence level. Like the other productive sectors under the colonial economy, the fisheries sector was also under the muddles of poverty, indebtedness, lower religious and social status and naked exploitation. After the dawn of Indian republic, the Government of India held many studies to evolve strategies to make the distracted economy stronger. In its study report, exploring need for and importance of specific measures to develop the fishing industry and highlighting the successful policies of some developed countries, the National Commission on Agriculture[7] remarked as follows: "The marine fishing industry at the production level, all the world over, is characterised by the inherent economic uncertainty because of high degree of risk involved in and high investment structure in proportion to its economic profitability. In view of these economic characteristics the marine fishing industry is given incentive support in almost all the countries, both developed and developing. This support is provided in a variety of forms though specialised organisations such as fisheries banks, fish development authorities, fisheries boards, marine fisheries services, etc. These organisations provide varied percentage of subsidies, preferential loans on long-term basis extending even up to 15 years or so and even giving relief by way of different patterns of tax exemptions. In countries lacking such specialised organisations, the adequate flow of credit to the fishing industry is ensured, through financial institutions by giving subsidies on the rate of interest and undertaking guarantee of loans by the governments. It may be emphasised that these countries have considered it necessary to give the incentive support to the industry on the basis of economic analysis of fisheries, which have attained an advanced stage. These incentive steps have assumed considerable importance in many countries for developing maximum efficiency in the harvesting sectors of their national marine fishing industries in not only maintaining production but also for increasing production from international waters. It also illustrates the advantage of putting the resources to the maximum economic utilisation involving an input of increasing fishing effort, without any gestation period on investment, as fishing units starts giving returns soon after they are commissioned" [5]

4.2.2. Administration of Indian Fisheries The Constitution of the Republic of India has enlisted the respective powers of the union and states to make laws and administer different sectors. Accordingly, as it was in the British India, development and regulation of marine fisheries within the territorial waters of Indian coast, known as inshore fisheries, and of inland fisheries were left under the administrative jurisdiction of the respective State Governments. The task for the development of offshore and deep-sea fisheries was vested with the Central Government.

4.2.2.1. Fishery Management by State The Fisheries Department of maritime states formulates and implements schemes for inshore and inland fisheries development and for improving the living conditions of fishermen. They assist the mechanisation of fishing boats, arrange bank loans through Fishermen Cooperative Societies for purchase and improvement of crafts and gears, and development of domestic marketing and also manage housing schemes for fishermen. They also establish boat building yards, nylon net factories, fishermen training centres, etc. Some State Governments have also setup Fisheries Corporations.

4.2.2.2. Role of Central Government In the Central Government, there is no separate ministry for fisheries and different tasks of marine fisheries development, from exploration to marketing, fall under the administrative jurisdiction of the Ministries of Agriculture, Commerce and the recently constituted Food Processing Industries. The Ministry of Agriculture deals with fish production, the Ministry of

Commerce handles the regulation and the task of promoting exports and the Ministry of Food Processing Industries looks after development of fish processing activities.

4.2.2.3. Development Agencies A number of organisations or agencies have also been established by the Central and State Governments to carry out various activities allied to fisheries development. Prominent among them are, Marine Products Export Development Authority (MPEDA), Inland Fisheries Projects, Reservoir Fisheries Projects, Angling and Aquatic Conservation Society of India, Fishery Survey of India (FSI), Central Institute of Fisheries and Nautical Engineering Training (CIFNET) Integrated Fisheries Projects (IFP), Central Institute of Coastal Engineering for Fishery (CICEF), Deep Sea Fishery Organisation (DSFO), Exploratory Fisheries Project (EFP), Fish Farmers Development Agency (FFDA), Indian Ocean Fishery Agency (IOFA), Central Inland Fisheries Research Institute (CIFRI), Central Institute of Fisheries Technology (CIFT), Central Marine Fisheries Research Institute (CMFRI), and Central Institute of Fisheries Education.

4.2.2.4. Other Facilitators Besides the exclusive organisations for the fisheries development, there are several other organisations which, inter-alia, assist the development of the fisheries industry, like the Export Inspection Council, Indian Institute of Packaging, Shipping Credit and Investment Company of India, National Bank for Agriculture and Rural Development (NABARD), Commercial Banks, Cooperative Banks, etc.

4.2.2.5. Legislative Measures Certain legislative measures have also been taken to empower the Governments with statutory authorities for regulating fisheries related activities. Some laws were enacted even much before the independence. The early fishery laws, however, were typically revenue oriented. Fisheries regulation in India is about a century old now. The Indian Fisheries Act of 1987, which made the development, management and conservation of fisheries principally a state subject, empowered the States (erstwhile Provinces) to formulate their own rules and laws for the safeguard of fisheries and provided certain conservational measures also to prevent the destruction of resources. This Act and the Andaman and Nicobar Fishing Regulations Act, 1938, empowered the Government to collect revenue from shell fisheries, pearl fisheries, etc. Since the establishment of the Exclusive Economic Zone (EEZ), legislative measures have been taken for the conservation of the resources of the Indian EEZ. Prior to that, there had not been any law for the regulating fishing by foreign fishing vessels except the Foreigners Act and the Indian Penal Code. The Territorial Waters, the Contiguous Zone, the Continental Shelf, the Exclusive Economic Zone and other Maritime Zones Act, 1976, besides extending sovereign rights of the country to explore, exploit and manage living and non-living resources of the sea around the country up to the EEZ limits, also marks the beginning of the fisheries legislation aimed at exploration, exploitation, conservation and management of the nation's marine resources. The Maritime Zones of India (Regulation of Fishing by Foreign Fishing Vessels) Act, 1981, aims at regulation of fishing by foreign fishing vessels.

4.2.2.6. Problems of Fisheries Administration - Data gaps

4.2.2.6.1. Available Data The data base on Fisheries comprises the following:-

(i) Marine fish production statistics published by the Central Marine Fisheries Research Institute (CMFRI).

(ii) Marine Products Export Statistics published by the Marine Products Export Development Authority (MPEDA).

(iii) Inland fish production statistics compiled by the Department of Fisheries.

(iv) Fish price statistics collected by the Department of Fisheries.

(v) Inventory of fishermen, fishing crafts and gear published through the Quinquennial livestock census.

(vi) Inventory of fishermen fishing craft and gear collected by the Department of Fisheries and the Central Marine Fisheries Research Institute periodically.

(vii) Socio Economic surveys conducted by the Central Marine Fisheries Research Institute, the Department of Fisheries and private organisations.

(viii) Productivity studies carried out by different agencies, including the department of Fisheries.

4.2.2.6.2. Statistical Methods Followed The Central Marine Fisheries Research Institute has evolved and roughly perfected a multistage stratified random sampling technique for gathering of marine fishery statistics for the country as a whole. Through a process of stratification of space and time, sample-fishing units are selected on a systematic random sampling basis by actual observation. Data on night landings are collected through enquiry. Special efforts are made to collect extensive data on mechanised fishing at Neendakara and Cochin fishing harbours. The Central Marine Fisheries Research institute publishes species wise data on a quarterly basis. In recent years Central Marine Fisheries Research Institute has also made certain ad-hoc surveys to supplement the data system by enumerating fishermen, fishing craft and gear in the marine sector at the village level on a census basis. The Marine Products Export Development Authority publishes product wise country wise export statistics (quantity and value) and a host of other information relating to the export market. Monthly and yearly information is collected directly from the exporters as well as other exporting and marketing agencies.

4.2.2.6.3. Inland Fisheries In the computation of inland fish statistics, the Sub Inspectors of Fisheries collect the data from 30 centres on a monthly basis. This is supplemented with production estimates received from the fish farms and reservoirs. The statistical cell in the Department of Fisheries also has undertaken occasional surveys to supplement the data. Beach side, whole sale and retail prices of fish is collected regularly by the statistical cell in the Directorate. The beach side prices of all species landed are collected from 14 centres on a fortnightly basis. The whole sale and retail market prices are collected from 20 principal markets spread over 10 districts. The districts of Idukki, Wynad and Pathanamthitta are not covered.

4.2.2.6.4. Statistical Gaps Even though the Central Marine Fisheries Research Institute has scientific methodology in working out of catch statistics, the published data are not fully devoid of discrepancies and statistical gaps. The discrepancies are because of the highly complex and volatile characteristics of the species of fish that vary from centre to centre and season to season. The statistical gaps comprise absence of village-wise data on catch statistics according to fishing gear and fishing craft. Even though the Central Marine Fisheries Research institute computes monthly data, these are not published or made available on a regular basis. The Inland fish production estimates computed by the Department of Fisheries is less reliable. There is no effective machinery for supervision of the statistical work of the Sub Inspectors of Fisheries nor is any scientific methodology available for collection of statistics. Even at the national level scientific and systematic methodology for collection of the Inland fish statistics is lacking. The production estimates reported from the reservoirs and fish farms managed by the Department of Fisheries often do not transmit a realistic picture.

As regards the inventory of fishermen fishing craft and gear thrown out by the livestock census, it is to be pointed out that the data are full of discrepancies and hence hardly serve any official purpose. The discrepancies are mainly due to the fact that enumerators without proper training about the fishing craft and gears survey the information. Further in the livestock census, fisheries actually get only secondary importance. In view of the lacunae in the fishery statistics published through the livestock census, the National Commission on Agriculture has recommended as follows: "Census of fishing craft, tackle and nets should be conducted independently if the livestock census by the State Fisheries Departments under the overall technical control and guidance of the Fisheries Division of the Central Ministry of Agriculture and irrigation".[6]

Fishery inputs data are essential for economic analysis of various development programmes in Fisheries. There is no regular system of collection and compilation of economic data on prices of diesel engines and spares, boat building materials, fishing gears and accessories etc. So also data on inland water areas and aquaculture are hardly available.

4.2.3. Review of Development Efforts

The following are the major development efforts undertaken by the Government and its agencies during the last decades.

4.2.3.1. Fisheries Development through Five Year Plans In the first two five-year plans (1951 - '60), the development thrust on the marine fisheries sector was on motorisation of the indigenous crafts, induction of mechanised crafts, establishment of infrastructure facilities for transportation, processing, preserving and storing of fisheries products and for providing landing and berthing facilities for crafts. The Government of India and the maritime states took up the fisheries sector as a thrust area for attaining economic development and in Five year Plans and allied development programmes, it was given primary and equal importance as that of the agricultural sector. The development strategies included the 'Blue Revolution' as an extension of the 'Green Revolution'.

4.2.3.2. Foreign Collaborations During the initial years of planning, the Government of India invited foreign collaborations and entered into various treaties with developed nations. India, being a newly formed republic, no country except Norway, the erstwhile Soviet Union, Canada and West Germany came forward with a helping hand. Many of the European countries, USA., Japan etc. were war destructed also. Though their original interests were in something else, Norway agreed to assist India in building-up the fisheries sector. As a result, the Indo-Norwegian Project was implemented in 1962. During the initial discussions, Norwegian authorities shared the view of Mr. C.C. John (the representative to the National Planning Committee, of the then Travancore-Cochin State), that the development tasks shall begin from what exists [7] Thus, the first priority was given for motorisation of the artisanal country crafts. The National Planning Committee rejected the opinion of Norwegian officials and argued for introduction of a bureaucracy for starting of scientific and research institutions.

4.2.3.3. Indo-Norwegian Project (INP) In 1963, the Indo-Norwegian Project (INP) was first introduced at Neendakara and Sakthikulangara Villages of Kollam district in Kerala as a pilot project. The task was anticipated for achieving "Area development and establishment of Integrated Fisheries Complexes." The declared objectives of the INP. were (1) Maximising of fish production for increasing foreign exchange earnings and for enabling higher domestic consumption of fish at reasonable prices, and (2) upliftment of socioeconomic conditions of fisher folk by increasing their efficiency. The initial experiments to motorise the artisanal crafts were discontinued soon, declaring that they were incompatible for motorisation. At the same time in 1964, dugout canoes of Sourastra coast were effectively motorised by the Norwegian team by installing inboard engines[8]. The authorities in Kerala decided to launch mechanised fishing boats that could operate through ports. By 1965, about 200 boats fitted with Gill nets were introduced at Neendakara, which showed only insignificant performance when compared to artisanal crafts.

During the period of INP, Indian prawns became a preferred item in the world market, particularly the American market. Taking into consideration the valuable foreign exchange, a new class of capitalist entrepreneurs entered the sector with 32 feet trawl-boats, which focused in catching prawns. The state government provided further impetus to trawling by providing subsidies and loans for the procurement of trawlers by the fishermen co-operatives. By setting up fabricated co-operatives the people or groups not actually engaged in fish production like officials, traders, industrialists etc. reaped the benefits. In the beginning when the number of trawlers was small, the impact of trawlers appeared to be constructive. Due to their ability to tap demersal resources better than the artisanal units, the trawlers gave a boost to the production without disturbing the artisanal fishermen.

In 1970s the share of catch by the traditional sector in the total landings, showed a gradual decline, bringing down their contribution of about 4,00,000 tonnes in 1971 to 1,50,000 tonnes in 1980, while the mechanised sector improved its position steadily. An analysis of the catches of demersal species shows a sharp decline during the late '70s, which gives a sign of over-exploitation by the trawlers.

4.2.3.4. Summary of Developments In the course of execution of banking policies for regional and priority sector development, duly endorsed by the NABARD and NCDC, much funds were also pumped in to the sector. Even if, there was no separate ministry or department for fisheries at the centre, all the state Fisheries Departments and cooperatives implemented the schemes. As a result, considerable changes took place in the traditional fisheries sector during the last two decades, like introduction of new techniques, craft and gear combinations and organisation.

4.2.3.5. Problems Identified in Development Irrespective of the continuing modernisation efforts in the capture fisheries sector, the economic growth among the anglers is not visible. Many studies conducted in this direction blame the indebtedness sponsored by the indigenous financiers and intermediaries of the market to be guilty for the continued backwardness of the class, and they have taken away all the benefits of modernisation efforts put in by the Government and other agencies.

4.2.3.5.1. Problem of Pricing In fisheries sector, the function of market intermediary is very strong. In fisheries, price at the landing stage is determined by the interaction of the forces of market and supply. One of the main features of the marketing of fish is the highly perishable nature of the products. The fishermen are usually compelled to dispose of their catch as quickly as possible after landing. The fisherman in no way can influence the price structure by varying supply of fish. In short run, his supply becomes completely inelastic in relation to prices. In addition, production is subject to heavy and uncontrollable fluctuations caused by the changing biological and meteorological conditions on the fishing grounds. On the other hand, the demand for fish is not usually affected by fluctuations in supply. The demand for fish might either be inelastic or can undergo significant and unpredictable short run fluctuations [9].

4.2.3.5.2. Measures Adopted to Overcome the Problem In view of the need for orderly marketing, which could establish the overall economic stability in the industry; it is necessary that the fisherman receives adequate return for his catch. The governments in developed countries have taken several effective support measures in this direction. These measures include either aid to support fishermen's income or support to keep landing prices at a reasonable level, or both. The operational support measures to stabilise fishermen's incomes are mainly in the form of direct grants and are designed to secure a normal income for fishermen, or fishing units faced with difficulties owing to seasonal fluctuations or structural changes in certain fishery sectors. The operational support measures designed to keep the prices of landed catches at a reasonable level, work either by streamlining excessive fluctuations, or by subsidising support prices to provide fishing units with a reasonable return. In some countries, where no price subsidy is given, the government helps by fixing the prices or by making the industry pay compulsory levies to be distributed as and when prices fall below a previously fixed minimum.

4.2.3.5.3. Remedial Measures Taken up In India, the active support measures have been merely confined to the improvement of marketing facilities and the introduction of specific systems intended at ensuring orderly marketing. There are some incentives for exports, e.g., cash compensatory support. But the fishermen, by and large, suffer from the market fluctuations of prices and fluctuations of income because of fluctuations in catches. Besides the fluctuations in the income of the fishermen, the rising prices of raw materials and the narrowing down of the margin between the cost of production and unit-value returns are posing serious problems to the stability. Further, there are conflicts between motorised country crafts, mechanised boats, and trawlers in intensively fished areas. Ways have to be found to protect the interests of the millions of small anglers operating motorised country crafts, with due emphasise to the need for increased production.

4.3. Recent Trends in Fisheries Development

The following are the major developments that took place in the fisheries' sector during the recent years.

4.3.1. Declaration of EEZ The expansion of fishing and allied industries has received even more consideration in recent years following the declaration of the 200 mile Exclusive Economic Zone (EEZ) by the maritime nations. This extension of EEZ has raised the maximum sustainable yield immensely by lessening competition from superior technologies that previously fished in this EEZ. Further, an FAO Committee on Fisheries estimated that India has gained much potential in fisheries compared to many developed nations. According to them, each developed country lost much more than 35 per cent of their catch because of the declaration of a 200-mile EEZ by the coastal nations. Japan lost as much as 63 pet cent of their catch, followed by USSR (53 per cent), West Germany (20 per cent), Poland (72 per cent), East Germany (70 per cent), Rumania (63 per cent), and Spain (57 per cent) [10]

4.3.2. Theoretical Approach to Fishing Today, the basic point of fishery management is the maximum sustainable yield (MSY), defined as the greatest yield that the stock can reproduce year after year. While the concept of the MSY has been criticised by biologists and economists e.g. Gulland, 1968[11]; Crutch field and Zelloner, 1963[12]; Christy and Scott, 1965; Crutch field and Pontecorre, 1969 it has some apparent advantages. Some theoretic studies have suggested the substitution of MSY by the maximum economic yield, or maximum rent[13]. However, it is known that the key variables determining production possibilities from a fish population are rate of entry into fishable age growth rates of individual fish, natural mortality, and fishing mortality. Thus, with the extension of EEZ, while opportunities to augment fish production and employment have been opened; they have yet to be efficiently exploited. In the event of inefficient exploitation and under exploitation, natural mortality would offset the net increase in the stock from the rate of enter into fishable age and growth. Exploitation of these opportunities poses complex biological, economic, social, and political problems.

4.4. Fisheries in India

Table 4.1 SUMMARY STATISTICS AT A GLANCE - INDIA

Area of India	3.3 million Sq. Km.
Continental shelf area	About 2.5 million Sq. km.
Coastal line length	8041 Kms
Fishermen population during 1994	
i) Full time fishermen	2394574
ii) Part time fishermen	1443223
iii) Other occupations	2121347
Total	8969144
Estimates of fish Production potential	
i)Inland Sector	4.5 million tonnes.
ii) Marine: Sector	3.9 million tonnes
Exclusive Economic Zone	2.02 million Sq. km
Fish production during 1995-96	
Inland sector	22.42 lakhs tonnes
Marine Sector	27.07 lakhs tonnes
Total	49.49 lath tonnes
Contribution of fisheries to GDP During 1994-95 (Quick Estimates)	
(a) At current prices	Rs. 10963 crores (1.28% of total GDP)
(b) At constant prices	Rs.1935 Crores (0.77% of total GDP)
Contribution of Fisheries to NDP during 1994-95 (Quick Estimates)	
(a) At current prices	Rs.9826 Crores (1.29% of total NDP)
(b) At constant prices(1980-81)	Rs. 1601 Crores (0.72% of total NDP)

Export of marine products during 1995-96

(a) Quantity	296.30 thousand tonnes
(b) Value	Rs.3501.11 crores

Primary Fishermen Co-operatives

i) No. of Societies	11440
ii) Paid-up Capital (in Rs. lakhs)	1704
iii) Membership (Numbers)	1250379
iv) Working capital (in Rs. lakhs)	8813

Source: *Kerala Fisheries - Facts and Figures*, Government of Kerala, 1998

TABLE 4.2 - PRODUCTION OF FISH IN INDIA

	Production in Metric Tons			Index Number Base 1961		
Year	Marine	Inland	Total	Marine	Inland	Total
1951	534	218	752	73.1	78.7	78.2
1961	984	277	961	100	100	100
1971	1162	690	1849	169.5	249.1	192.7
1981	1445	999	2444	211.2	360.6	254.3
1982	1427	940	2367	208.6	339.4	246.3
1983	1529	987	2506	222.1	355.9	260.7
1984	1779	1082	2861	260.1	390.6	297.0
1985	1734	1090	2824	253.5	393.5	293.9
1990	2275	1402	3677	332.6	506.1	382.6
1991	2300	1536	3836	336.2	554.5	399.2
1992	2447	1710	4157	357.7	616.9	432.5
1993	2576	1789	4365	376.6	645.8	454.2
1994	2649	1995	4644	365.1	720.2	483.2
1995	2692	2097	4789	393.6	757.0	488.3
1996	2707	2242	4949	395.8	809.4	515.0
1997	2970	2380	5350	556.2	1091.7	711.4

Sources: Government of India, *Economic Survey* 1997-98; A.N. Agarwal, Hari Om Varma, *Indian Economy: Statistical Year Book*, 1998. p 138

4.4.1. Technological Problems With the extension of EEZ, it has become necessary to go in for deep-sea fishing, but India had neither the experience nor the infrastructure to do so. Efforts were made to promote mechanised fishing, and to augment landing and harbour facilities, but the mechanised trawlers have been operating in the same areas as the traditional fishermen. This conflict of interest has created economic, social and political problems among the fishing community. As a logical extension of the trends (emphasis on modernisation and introduction of capital intensive technology) in fishing since the inception of planning, big business houses have entered the fishing business. Their superior technology and access to larger markets clash with smaller processing units. These problems have caused considerable concern among policy makers.

4.4.2. Fish Landings As per the latest data, in the year 2000, India's catch was around 3.2 per cent of the world total, and 1.59 per cent of the world trade in terms of value. In terms of quantity, India's share in the world trade was only 0.7 per cent. According to CMFRI estimate, there were 2039 marine fishing villages, the maximum being in Andhra Pradesh followed by TamilNadu, Maharashtra, Kerala, and others. There were 1451 landing centres, and 2039 marine fishing villages with total fishermen population of 9.59 lakhs. Of these, 2.32 lakhs were involved in actual fishing. The economy of the fisheries of the country may be presently classified and taken to be made up of four sectors, viz. (1) non motorised traditional, (2) motorised traditional, (3) mechanised small scale and (4) modern large scale. The traditional motorised sector forms the base of the fish economy. The motorised traditional sector consists of well over half a million fishermen, using over a lakhs of different types of craft gear combinations.

4.4.3. Contribution in GDP The degree to which the economy of different nations depends upon their fisheries industry varies widely. At one extreme is Iceland its fish and fish products make up more than 90 per cent of all exports. In India, fishing and allied industries contributed about two percent of gross domestic product. The percentage share of fish and fish preparations in total exports was around three percent. The availability of fish per capita was only around 10.5 Gms. per day, which was extremely low. Furthermore, the per capita availability of fish in India does not reflect the inequality in availability between coastal areas and interior markets arising out of inadequate marketing and refrigeration facilities in the interior markets. [14]

Table 4.3 MARINE FISHERY RESOURCES OF INDIA

Sl. No	State/ Union Territory	Continental Shelf ('000 Sq. Kms.)	Number of landing centres	Number of villages	Approximate length of coastline(Kms.)
1	Andhra Pradesh	31	379	409	974
2	Goa	10	87	91	104
3	Gujarat	164	854	851	600
4	Karnataka	27	28	204	300
5	Kerala	40	226	222	590
6	Maharashtra	112	184	395	720
7	Orissa	24	63	329	480
8	TamilNadu	41	362	442	1000
9	West Bengal(P)	17	47	652	157
10	Andaman & Nicobar	35	57	45	1912
11	Pondicherry	1	28	45	45
12	Lakshadweep	4	11	10	132
13	Daman & Diu	0	7	31	27
	Total	**506**	**2333**	**3726**	**8041**

Source: Government of India, *Hand Book on Fisheries Statistics* 1996. p. 82

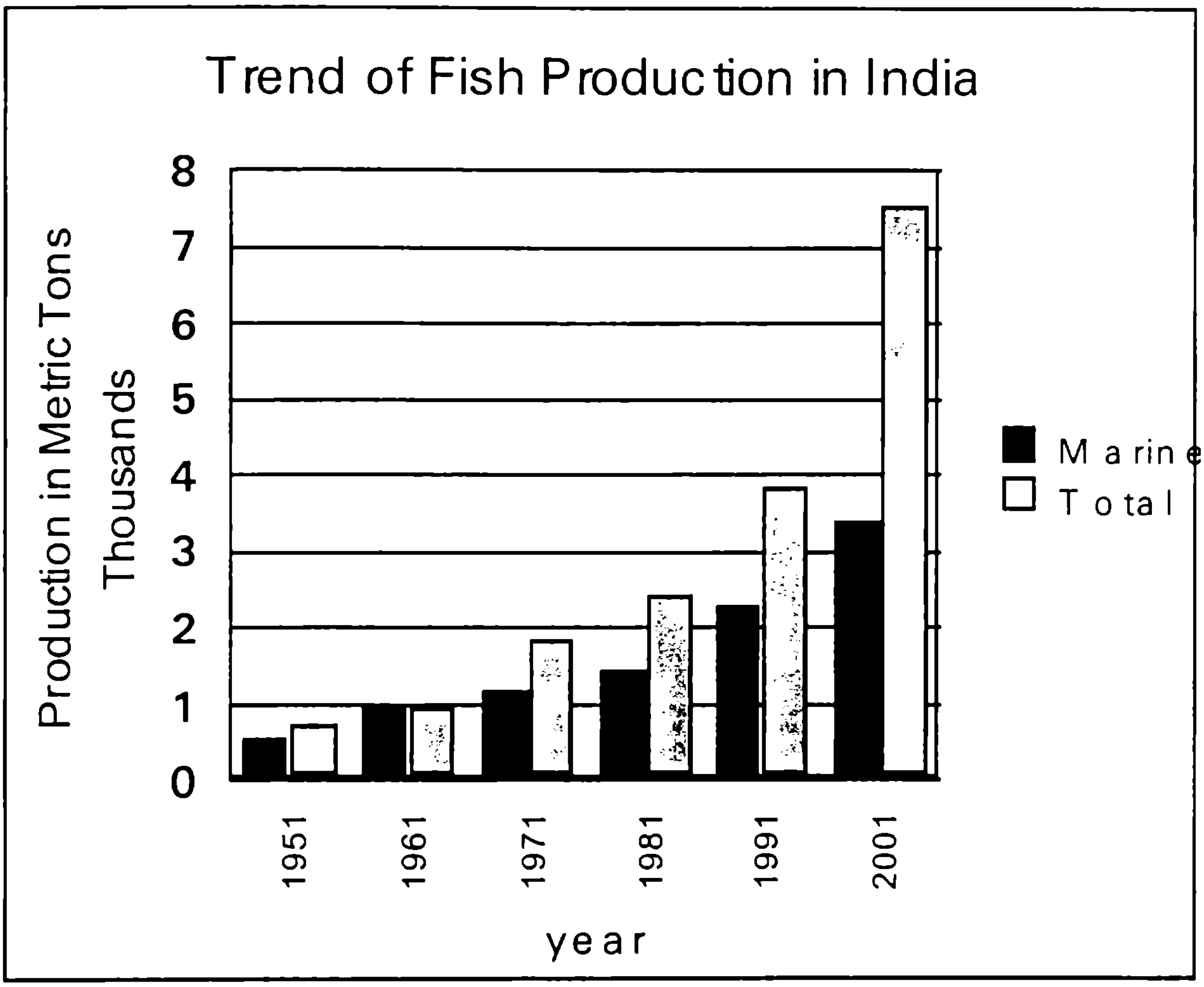
4.4.4. Marine Resources of India's EEZ The Indian EEZ covers an area of 74.917 million sq. Kms and has a yield potential (annual sustainable yield) of 14.39 million tonnes. At present only 2.88 million tonnes is being exploited. Over 90 per cent of marine life is concentrated in the 10 per cent of the waters above the continental shelf, the sea bed and the subsoil of the submarine area adjacent to the coast and extending to the depth of 200 metres.

TABLE 4.4 STATE-WISE PARTICULARS OF COASTLINE, CONTINENTAL SHELF AREA AND SHARE IN LANDINGS

State/Union	Length of the coast-line (km.)	Continental shelf area (sq. km.)	Landings	
1. West Bengal	680	27001	46491	55.23
and Orissa	(9.51)	(14.96)	(11.21)	(4.08)
2. Andhra	970	16607	31044	31.32
Pradesh	(13.57)	(9.20)	(7.48)	(9.71)
3. Andaman	1500	NA	16056	1.33
	(20.98)		(3.87)	(0.10)
4. TamilNadu	960	23255	41412	26.08
	(13.43)	(12.88)	(9.98)	(16.71)
5. Pondicherry		NA	NA	10.12
				(0.75)
Sub-total (East coast)	4110	66863	135003	24.08
6. Lakshadweep			4336	2.574
			(1.85)	(0.19)
7. Kerala	560	12569	35941	31.05
	(7.83)	(6.96)	(8.66)	(24.47)
8. Karnataka	270	7936	25473	95.28
	(3.78)	(4.40)	(6,14)	(7.84)
9. Goa	110	2849	9984	34.97
	(1.54)	(1.58)	(2.41)	(2.58)
10. Maharashtra	600	25512	104758	93.60
	(8.38)	(14.13)	(25.25)	(21.70)
11. Gujarat	1500	64810	99373	71.29
	(20.98)	(35.89)	(23.95)	(12.67)
Sub-total	3040	113676	279865	27.76
(West coast) Total	7150	180539	414868	1351.84

Notes: 1. @ included in TamilNadu.
2. Length of the coastline may not be added up to total of all India, since Andaman's coastline was also included.
3. Figures in parentheses are per cent share of present level landings (1976) in total potential yield.
4. Figures in parentheses are per cent share of corresponding states in all-India total.
Sources: 1. "Report of the National Commission on Agriculture 1976" Part VIII, Ministry of Irrigation, Government of India, New Delhi. 2. Column 5: Central Marine Fisheries Research institute (CMFRI) Cochin- 18

Chart 4.1. TREND OF FISH PRODUCTION IN INDIA



The continental shelf area of India's EEZ extends to 414868 sq. Kms. The maximum continental shelf area is off the coast of Maharashtra, followed by Gujarat, West Bengal, Orissa and Kerala. The average annual catch of Indian fisheries up to two hundred metres depth range is around 0.9 million tonnes. The yield potential and present level of loading indicates the unexploited potential. [15]

In terms of the spatial distribution of total landings, Kerala has recorded the maximum total catch in almost all the years followed by Maharashtra, TamilNadu, and Gujarat. Among all the maritime states, on an average (1966-98), Kerala contributed the highest per cent share (32.75) of the total marine fish landings followed by Maharashtra (18.32), TamilNadu (15.50), Gujarat (10.84), Andhra

Pradesh (8.71), and Karnataka (8.09). Further, it was observed that the states on the West Coast contributed as much as 72.06 per cent of the total landings. For the states on the East Coast it was only 27.94 per cent (Table 4.4). Various maritime states and Union Territories have experienced differential growth rates over the last 10 years. Although Kerala always had the largest share of the total catch its rate of growth (compound) has been only 2.20 per cent over these years. The highest rate of growth experienced for the landings has been in Andaman and Lakshadweep followed by the landings in Gujarat, Maharashtra, and Andhra Pradesh. The rate of growth of marine fish landings in India between 1966 and 1996 has been 5.24 per cent per annum.

4.5. KERALA FISHERIES

4.5.1. A Socio Economic Analysis

4.5.1.1. Location The State of Kerala is situated between 8°-15' and 12°-45' N latitudes and between 74°-30' and 77°-30' E longitudes and is the most densely populated among the states of the Republic of India. The state is well de-marked by natural boarders like the Arabian Sea on west, Western Ghats on the East and the states of TamilNadu at South and Karnataka at North. The state is blessed well by the nature with abundant water masses, rich greenery of evergreen tropical forests and flora and fauna of rare species and it is aptly called the 'Gods own country'

4.5.1.2. A Draft of Fisheries Sector Fish and fisheries have a very important place in the socio cultural fabric of life in Kerala. However, there is a situation where fishing hamlets in Kerala have not benefited for many decades out of the better value of output in the sector or the state's overall efforts for enhancing the quality of life. The poverty of the marine fishing communities is well-known. Living on the geographic margins of the land and depending solely on the sea for living, they have been side lined in the economic and socio cultural progress, which has been witnessed in the rest of the state. The only other occupational group in similar situation is the tribal hamlets who live on the hilly fringes of the state and depend primarily on the forests for their livelihood. It is essential to note that it is the communities that depend on natural or common property resources and inhabit on the periphery of the natural boundaries of the state - the sea and the hills- that face this adverse situation.

Table 4.5 MARINE FISH LANDINGS IN KERALA (1969-'80)

Year	Total Landings Tonnes	Mechanised Sector Tonnes	% Share	Traditional Sector Tonnes	% Share
1970	3,92,880	52,571	13.6	3,40,309	86.6
1975	4,20,836	1,80,111	42.8	2,40,725	57.2
1980	2,79,543	1,34,783	48.2	1,44,760	51.8
1985	3,32,503	1,14,273	34.4	2,18,230	65.6
1990	6,62890	2,45,269	37.0	4,17,621	63.0
1995	7,01,540	2,65,420	37.8	4,36,120	62.2
2000	9,22,755	3,79,210	41.0	5,43,545	59.0

Sources: C.M.F.R.I., Fisheries Department, Government of Kerala

4.5.1.3. Reasons for Backwardness The rationale for the poor quality of life and the below par situation of habitat of the marine fishing society is the density found on the narrow strip of land along the coastline. The main reasons for this over crowding are - (a) the highly scattered nature of the marine resource (b) the decentralised nature of fishing operations and (c) using of traditional beach landing crafts. Every fisherman prefers to live on the seafront near the point where he lands his craft and from where he can observe the sea.

4.5.1.4. Density of Fishermen Habitats In Kerala there are 222 fishing villages situated in 590-km coastline. None of these villages is more than half a kilometre wide from the waterfront. With a total marine fisher folk population of 769,100 in 1996 and a residential area of 245 square kilometres (590 km x 0.5 km) the population density in marine fishing villages are around 3,139 persons per square kilometre. This is in comparison to the state density of 742 per square km, which is already the highest in India and the World.

Table 4.6. Land ownership in Kerala and its marine fishing villages

(% of households)

	No land	<5 cents	5-10 cents	11-100 cents	101-500 cents	>500 cents
Kerala	n/a	9	73	73	15	3
Fishing villages	16	32	28	23	1	

Source: Government of Kerala, cited in "Central Tendency and Outlier", *Kerala: The Development Experience*, Centre for Development Studies, Thiruvananthapuram, 1998. p.184

4.5.1.5. Land holding The true picture of this crowding is reflected in the land holding pattern. Kerala is a state where every household is entitled to a piece of plot as per the Kerala State Homestead Act. According to the Act every household is entitled a minimum area in between 2 and 10 cents (100 cents = 1 acre). The above table shows that in 1979-80 as many as 16 per cent of the households in marine fishing villages did not possess even homestead land. A large section of these houses are thatched huts on terrain even beyond the cadastral survey (land beyond the cadastral survey on the seafront is under central government jurisdiction). As a result they are always prone to the perennial risk of their huts being 'eaten by the Monsoons Sea' This condition has altered slightly in the post-1985 period following the granting of title, deeds to those who occupied public lands (purambokku). Further, the households in the fishing villages have undersized land holdings. Following sub- division and fragmentation this situation has become more distorted. This situation has an immediate effect on the settlement pattern and the quality of shelter and allied amenities. Thus this settlement pattern resembles the urban slums. Those who have no land or ownership to the plot they occupy and erect a shelter there, it is natural that they have to choose temporary thatched roof and wall structure. The severe disparity in the quality of housing for Kerala as a whole and the fishing villages is clear from Table 4.7.

TABLE 4.7 HOUSING AND RELATED AMENITIES IN KERALA (1989-90)

	All Kerala	Fishing villages
Total houses	40,65,895	118,801
Percentage of homes which are:		
Thatched	14	48
Mud and semi-thatched	4	36
Brick and/or stone	72	16
Electrified	64	10
With latrines	59	5
With water easily available	61	33

Source: GOK 1990 and 1991 census cited in "Central Tendency and Outlier", *Kerala: The Development Experience*, Centre for Development Studies, Thiruvananthapuram, 1998. p.185

4.5.1.6. Health Conditions Lack of basic amenities, the use of the seaside as toilet, and the extreme crowding caused by the cluster like settlement etc. lead to frequent negative mutual relations between families. Contagious diseases are common in fishing villages which spread very rapidly under the dirty surroundings. Many studies on the health rank of Kerala State probe the irony of economic backwardness and a high level of health development; point to this paradox in the coastal areas. According to the studies, respiratory and skin infections, diarrheal disorders and hookworm infestations are much more prevalent in the coastal areas of the state.

4.5.1.7. Gender Bias There is a well-built gender bias in fishing communities, the sex ratio being 972 females to 1,000 males in 1991, which is just opposite to the state proportion. This again is contrary to the all-Kerala situation where females outnumbered males by 32 per 1,000 in 1981 and by 40 per 1,000 in 1991. Literacy and education are the hallmark of Kerala's social advancement. On this facet also marine fishing commune lag behind rest of the state. Resolving the irony of the poor 'capability building' environment in the fisheries sector in a state that possess a very high quality of life requires an understanding of some closely interconnected economic, social and cultural features particular to the fishing communities.

4.5.1.8. Social Structure As far as the fishermen are concerned, their means of livelihood, the sea is a common property resource to which every one has free access. This resulted in a greater degree of equality between them and gave the feeling of a barrier-free access to resources. This fact, combined with the situation of a perpetual though variable harvest from the sea, has been a vital limit in creating a consciousness of their class position. Together with this, there is a strong element of chance and uncertainty in their occupation. Fishermen with the same type of fishing gear, fishing in the same part of the sea during same time, catch entirely different quantities of fish. Such outcomes are alien to any other profession and almost beyond logical explanation. They rationalise this situation by faith or religion, which describe good and bad yields as the results of rituals and the blessing of gods.

4.5.1.9. 'Price Taker' Position It is more interesting to look in to the economic side of this social structure. Fishermen cannot live by fish alone. The desire to barter or exchange the produce of their labour is the character of every body engaged in production. Whenever a fisherman nets more than a few fish he has a 'surplus'. This, being highly perishable, must be disposed of soon, thus creating a greater dependence on persons specialising in trade. Further, as the beach on which the fishermen live are not conducive to the growth of plants other than coconut trees, the dependence on the market for all forms of food and even firewood is virtually, total. This greater degree of penetration of the market into every aspect of their daily lives made them susceptible to a variety of market-related conditions. They are reduced to 'price-takers' on every front: for all the inputs required for life, occupation and livelihood and for the produce of their hard and risky labour.[16]

4.5.1.10. 'Co-operative Conflict' in Production Relations Merchants and middlemen point out to fishermen that the fish in the sea are 'free goods' which fishermen harvest daily for very little investment and negligible costs. The merchants and middlemen claim that it is because they finance the investment and arrange for the distribution and sale, this 'free goods' acquire value. As long as fishing was undertaken without using any form of mechanical propulsion, and despite the high level of 'co-operative conflict' in their relationship with merchants and middlemen, fishermen are accepting this argument. Even after the introduction of modern technologies, and the greater influence of capitalistic relations of production on many fishing units, one distinguishing feature of fishing has been the continued absence of a system of wage payments and the dominance of the income-sharing system between fishermen crew and craft owner. This has continued to disguise the contradictions in the production relations.

4.5.1.11. Influence of Religion The role of religion, as well as its position in the socioeconomic and cultural fabric of fishermen societies further aggravates this eventuality. Religion constitutes one of the main elements of the culture of fishing communities everywhere in the world. It influences the way they represent themselves, their community and society. Artisanal fishing in tropical seas is basically a hunting and gathering activity in which those who work are directly confronted with the forces of nature. This fact and the strong element of chance in getting a good catch play an important role in creating a 'supernatural' belief in their lives and give a superstitious basis for religion. For centuries the fishing communities in Kerala were under a tribal type of social organisation, different from the tribal mode of production that characterised agrarian communities. Although all the marine fishing communities have over the centuries adopted Hinduism, Islam or Christianity, their prior social status and the nature of their occupation continued to bestow on them a low status even within their respective new religious groupings.

4.5.1.11.1. Hindu Dheevaras The present-day Hindu fishermen, Dheevaras or Arayas, the majority of whom live in the central districts of Kerala state, were never integrated to the caste structure of Hinduism. They remained at the bottom of the social structure because of both their origin and the nature of their economic activity, which involves the destruction of animal life, which was basically against the Hindu principle of 'not to kill' The Hindu religious organisation, lead by the Brahmins, has therefore not interfered with these out-caste communities. As a result they were kept aloof from the orthodoxy of beliefs, rituals or customs. Consequently they continued to remain in their tribal social organisation (karayogam), which had a democratic and flexible social set up. The 'Hinduism' of these fishermen is based on the traditional profession which never accepts inequality.

4.5.1.11.2. Christian Fishermen The origins of the Catholic fishermen go back to the Portuguese colonisation of the fifteenth century, which had its pervading influences in the southern districts of Kerala. Mass conversions took place principally among the minority communities, excluded from the mainstream of the rigorous caste society of Hinduism. Latin Catholicism, founded on a highly centralised institution based on authority of the priest, who became the central social leader. Being a marginalised and vulnerable minority community to start with, it affirmed its identity by the religious institution. It was the noticeably large church buildings that are the hallmark of the poverty-stricken Catholic fishing villages, which controlled a good deal of the social dealings at the local level. The church granted moneylenders and merchants a special status in parish responsibilities to exercise economic control over the labouring fishermen. The rights to collect a share of daily catch, the church tax, now days called Nercha or charity, often as high as 5 per cent, was auctioned out to such persons. No fisherman can ever default on this tax: the priest before the defaulters' burial would collect it if necessary. Questioning the ways of the Church or deviating from its fiat can result in an 'ooru vilakku' or banishment from the parish and even more stringent punishment like being lashed to a cross and beaten. This kind of control reinforced the inferiority complex as well as the fear of influence from the power of other ideological or social groups.

4.5.1.11.3. Muslim Fishermen The Muslim fishermen belong to the second generation of converts from among the marginalised tribal groups in the merchant dominated society of the Sultanates (1100-1400 AD) of the present northern districts of Kerala State. Islam has always functioned through specialised religious agents called the Imams, who played a major role in shaping the social order of the group using various regulations, which gradually resulted in changes in the structure of these communities. According to them God is master of history, who will dictate the formalities of social organisation. Cohesion within the community is strictly maintained by the mosque councils, although they do not interfere with the economic activities of the community but may deliberate on which political party the community it should support.

4.5.1.12. Social Stigma Religion plays a major role in defining the fishermen's identity above the social structure. In practice, being Hindu, Muslim or Catholic is the only basis of segregation among fishermen, who are otherwise basically similar.

Even today, Muslim and Catholic fishing communities continue to be regarded as 'inferior' within their own larger religious groupings. Having been forced to give up their earlier tribal or kinship social organisation in the face of the value systems and ethics propagated by organised, centralised, male-dominated religious structures, the continued inferior status only reinforced their social and cultural disabilities. Consequently, the discrimination meted out to them from the society continues unabated. This is particularly strong among the Latin Catholic fishermen, making them the most socially and culturally disadvantaged among the fishing communities of Kerala. The social stigma attached to these communities is evident from the often countered reluctance of government servants to serve in schools, health centres and other such social-service facilities extended to these coastal areas by the state.

4.5.1.13. Educational Level A more important disability that continues to hamper social change within these communities has been the low and inferior level of educational attainment of the community. The literacy levels of fish-workers are lower than those for other workers in Kerala. In practice going to school imply keeping away from fishing. Most of the 'art' of fishing, particularly using the traditional craft and gear, could only be picked up through a process of 'learning-by-doing' from a very young age. Thus, schooling, particularly for the male members, meant pulling them out of their traditional occupations. It is interesting to note that these compulsions are strong among the Latin Catholic fishermen, using oldest technologies like Kattamaram, the use of which requires a high degree of skill, courage and ability to swim. Different from other groups, there had been no change in this technology of production; its reason could only be attributed to non-participation in formal education. The study on the Kattamaram fishermen of Thiruvananthapuram district undertaken in 1991 confirms this argument.

4.5.1.14. Reasons for Educational Backwardness A study that scrutinised three marine fishing communities in Kerala from three geographic regions and the three religions concluded that certain occupational, cultural and religious barriers do account for the low level of educational attainments of youth from the fishing communities. However, the study argues that the more reasons for the low attainment seems to be the grossly inadequate associative conditions required for doing well in school: the lack of funds to buy books and clothes for school, poor habitat resulting in inadequate facilities for home study, and inadequate parental attention and backup etc. Consequently the youth from the fishing communities are not in a position to compete successfully with their equals from other socioeconomic conditions. It is to be noted that, despite the remarkable contribution of Muslims and Catholics to high-quality education in Kerala, the benefits of these have not infiltrated in to their own fishing communities. In a highly, literate society, basic education plays a major role in making information available to people on questions of life and living and also leads to greater utilisation of public facilities. Those with some basic education go about provisioning themselves in a more informed manner. Educated mothers are the best assurance for children's education. The fishing community at large had been deprived of all this because of their low educational attainments.

4.5.1.15. Social Movements and Fishing Communities The social movements of the nineteenth and early twentieth centuries in Kerala, like SNDP, KPMS and even trade unions etc. were largely restricted to the communities in the agrarian setting. In the post-independence era, the desire of a parliamentary democratic system, made political parties anxious to see their efforts at politicising of social causes pay off in the form of votes. As a result, irrespective of their position on the political spectrum, all the parties were involved in taking up a variety of causes which focused on the issues in the agrarian and related natural resource sectors and the people involved. Two communities were left out of this:

the tribal people of the hills on the high eastern fringes of the state, and the fishing communities on the western coastal front.

4.5.1.16. Political Slavery In the case of the fishing communities, particularly the Muslims and Catholics, the control by religious interests and the economic domination by merchants and middlemen from within the communities, gave credibility to the perception held by political parties in the state that fishing communities were 'vote banks' to be persuaded only at election time. The conservative parties, which generally got the open backing of organised religious forces and the economically powerful, were able to assure the votes also. Consequently they considered it unnecessary and even unwise to undertake any direct mobilisation work among the fishermen. They preferred to approach them always through their religious leaders or the influential persons in their communities, generally non-fishermen and often merchants. On the other hand, the more progressive political parties with secular policies and working-class concerns considering 'petty producers', an un planned group to mobilise. Also, under the circumstances described above, they could hardly hope to get their votes. This suspicion was confirmed as early as 1959 following the exhibition of the mesmerising power wielded by the Catholic Church in inciting its 'faithful flock' of fishermen to come out en masse on to the streets in support of a 'liberation struggle' against the first Communist ministry in Kerala State. The paradox was that the main plank of this 'liberation struggle' was to protect the rights of minority communities to run their own educational institutions, the portals of which the majority of the fishermen would hardly have the fortune to enter. The end result of this was that, with the exception of a few pockets in central Kerala, where Hindu fishermen were in the majority, and in north Kerala, where the production relations in artisanal fisheries among the Muslim fishermen were capitalistic in nature, the progressive, democratic, political processes had little influence in these communities.

4.5.2. Role of Marine Fisheries in Kerala

4.5.2.1. Significance Kerala is well known for its rich marine fish resources, especially prawns and oil sardines. It has a coastline of 590 km and a continental shelf area of about 36,000 sq. km. It ranks second in terms total fish production and first in terms of marine fish production in India. In 1990-91, its total fish production was 5.51 lakhs Mt. of which 5.14 lakhs Mt. was contributed by the marine fisheries. In 1988, Kerala contributed about 20% of the India's total marine fish catch and accounted for nearly 35% of the country's total earnings from the export of marine products. Kerala thus occupies a place of prime importance in the marine fisheries sector of India's economy. Nine of the fourteen districts of Kerala have Arabian Sea, as boarder on the western side offering Kerala a coastline of 590 km. This shoreline is inhabited by a population of over half a million, of which 150,000 are active fishermen. (1991 Census) Kerala occupy a very significant role in the marine economy of India contributing over 35 per cent of the total marine landings and 60 per cent of the marine exports in the 70s. But in the mid and late 80s, Kerala began to be overtaken by other States, causing much concern to the planners and fisheries officials in Kerala about the sector.

4.5.2.2. Development Thrust With the largest potential of marine fishery resource in the country, Kerala hoped to give the fisheries sector a major thrust in its planned development efforts. The pattern of development in the fish economy of the state was different in form other comparable sectors of the economy. Under the pressure of organised work force, the government implemented techno-economic and welfare measures in other sectors of the economy. In agriculture and the traditional land based industries like coir, toddy tapping, cashew processing, beedi making etc., no labour displacing technologies were introduced. There were a number of social security and welfare measures also, that acted as a safety net, which prevented a substantial marginalisation of these workers. Institutional initiative among these workers in the form of co-operatives and trade-related organisations has also given considerable success.

TABLE-4.8 - TRENDS IN FISH PRODUCTION IN KERALA AND INDIA

('000 tonnes)

Period	Kerala		India	
	Quantity	Production Index	Quantity	Production Index
1951-55	131	100	566	100
1956-60	259	198	763	135
1961-65	264	202	735	130
1966-70	349	266	931	164
1971-75	906	310	1200	212
1976-80	332	253	1331	235
1981-84	348	266	1539	272
1985-86	295	225	1716	303

Source: T.R. Thankappan Achari, Paper presented in seminar on *Fisheries Crisis and Policy Approaches,* Kerala, 1987

Table 4.8. indicates that fish production in Kerala was on the increase till about 1975 but kept falling steadily after that. The all India figures continued to show an increase in production

4.5.2.3. Maldevelopment of Fisheries Sector Being unorganised, the marine fishermen did not benefit from such 'protections' against labour displacing and ecologically inappropriate technologies. Also, the top down, state sponsored, institutional initiatives in the sector, mostly in the form of co-operative societies, were failure. They hardly benefited the fishermen, who were even unaware of their existence. Another factor for the poorer socioeconomic conditions of marine fisher folk was their inability to legitimise and establish their traditional, but unwritten, claim to custodianship of the coastal waters as the 'common property' of their community. Thus, when the state began to promote fisheries development schemes like the Indo-Norwegian Project, it created a sense of open access regime in the coastal waters, where anyone who had capital resources could freely enter. This feature is alien in any other sector, as there are clear property rights and several barriers to entry for capital and labour from outside the sector. This led to the unregulated entry of capital into the coastal fishery and the rampant use of fish-harvesting technologies that initially raised the output, but resulted in destruction of the coastal Ecosystem. The externalities of technology resulted in the reduction of output for all fishermen irrespective of the technology they use. The initial flow of benefits from this situation was very unevenly distributed: the investors from outside the fishing community who entered the fishery became wealthy, and the traditional marine fisher folk who had no employment options other than fishing were the most adversely affected by the ecological crisis[17]

4.5.2.4. The Conflict with Modern Sector In the absence of controlling measures and scientific use of crafts and gears, the coastal waters became a region of stiff competition between the traditional artisanal fishing folk seeking to earn bread on some 30,000 indigenous crafts on one side and 3000 fishing boat owners usurping the richness of export potential on the other. With the total fishing space and the fish stock being limited, fishing by mechanised boats and traditional crafts became a zero-sum game; the former cornering a higher share at the expense of the latter. Pushed to the wall by these developments, the artisanal anglers reacted strongly in the early '80s. Their response took two forms: unionisation and motorisation. These were the two major events in the whole history of traditional fishing sector in the country. [18] Unionisation was for pressurising the government to make policies and law for shielding their rights and to challenge the money power of the mechanised fishing fleet owners, who used all possible gears to extract the depleting fish wealth. Motorisation was to adopt themselves to the modern technology of using large gears to make economic fishing. The early eighties witnessed a number of conflicts in the sea between the two groups causing much damage to many mechanised crafts and gears.

Table – 4.9 - GROWTH TREND OF THE STATE INCOME AND INCOME FROM THE FISHERIES SECTOR

(At 1980-81 Price Index)

Years	Index of Income		Percentage of share of Fisheries sector income in State income
	State Income	Fisheries Sector Income	
(1)	(2)	(3)	(4)
1980-81	100	100	2.05
1981-82	99	75	1.55
1982-83	101	90	1.82
1983-84	97	99	2.09
1984-85	103	87	1.74
1985-86	107	91	1.74
1986-87	104	76	1.50
1987-88	107	69	1.32
1988-89	118	97	1.69
1989-90	124	101	1.66

Source: *Kerala Fisheries an Overview,* Department of Fisheries, Government of Kerala. 1992 P.95

4.5.2.5. Results of Unionisation The political fight of fishermen through their unions has been a long drawn-out affair and has had only limited achievement. The positive effect has been that the Government has understood and approved the unfair nature of competition with trawlers. It took up the pioneering step to regulate the exploitation of marine fisheries through legislation. The Kerala Marine Fishing Regulation Act 1980 provides the regulation and prohibition of any operation in sea by any orders issued under section 4 of the Act and for licensing and registration of fishing vessels. The main objectives of the Act were to protect the interests of traditional fishermen, to conserve fish wealth, regulate fishing on scientific lines, and to maintain law and order in the sea. The Act prohibited fishing by mechanised boats up to a depth of 20 Metres. However, due to the political clout of the trawler owners, the execution of many provisions of the Act is lax.

TABLE – 4.10 - DISTRIBUTION OF COAST LINE AND CONTINENTAL SHELF AREA

District	Coastline		Continental shelf area							
	Km	%	0-10'		10-40'		40-100'		Total	
			km2	%	km2	%	km2	%	km2	%
1 Thiruvananthapuram	78	13.2	154	3.4	2930	12.0	1091	10.7	4175	10.7
2. Kollam	37	6.3	349	7.8	1821	7.5	719	7.0	2889	7.4
3. Alappuzha	82	13.9	742	16.6	2900	11.9	1139	11.1	4781	12.2
4. Ernakulam	46	7.8	614	13.7	977	4.0	592	5.8	2183	5.6
5. Thrissur	54	9.2	461	10.3	1792	7.3	714	7.0	2967	7.6
6. Malappuram	70	11.8	512	11.5	3723	15.2	871	8.5	5096	13.0
7. Kozhikode	71	12.0	717	16.0	3772	15.4	1591	15.6	6080	15.5
8. Kannur	82	14.0	527	11.8	3726	15.2	1999	19.5	6247	16.0
9. Kasargode	70	11.8	397	8.9	2811	11.5	1508	14.8	4713	12.0
Total	**590**		**4473**		**24442**		**10244**		**39139**	

Source: *Kerala Fisheries an Overview*- Department of Fisheries. Government of Kerala. 1995. p.93

Following the repeated demands of the trade unions, the Government issued an executive order in May 1981, forbidding the operation of trawlers during monsoons period, the spawning season of several species, as trawling during that season would lead to the devastation of juvenile fish. Even though this ban raised many legal as well as ecological questions, it has been in force for the last few years in its full tune or in a limited manner. There is a need to enforce more effectively the provisions of the Act and this cannot be done unless there is a strong political will to do so at national level.

TABLE – 4.11 - FISHING HARBOURS IN KERALA

Already constructed	under construction	proposed to be constructed
Neendakara	Vizhinjam	Ponnani
Cochin	Thangassery	Munambam
	Chombala	
	Puthiappa.	
	Moplabay	

Source: Government of Kerala, *Kerala Fisheries Facts and Figures*, 1992, p. 17

4.5.2.6. Present Situation With the opening up of the economy, the Government of India has been inviting foreign entrepreneurs to participate in the fishing sector also, particularly in induction of deep-sea vessels in the EEZ of the country. The last decade was a period of crisis in this sector, with globalisation and modernisation on one hand and the interests of artisanal fishermen on the other, who look upon the sea as 'Mother Goddess'. They live in constant fear of their livelihood, ecology and culture being threatened.[19]

TABLE-4.12 - SECTOR-WISE PRODUCTION OF DIFFERENT CRAFT-GEAR COMBINATIONS

Period	Trawling	Purse-seining	Gill netting	Motorised fishing	Non-motorised	Total
1982-83	71	10	10	88	169	348
1984-85	98	17	13	149	105	377
1985-86	91	13	10	115	103	332

Source: T.R. Thankappan Achary, *Techno Economic Analysis of Motorisation of Fishing Units*, PCO, Thiruvananthapuram, 1991.

4.5.2.7. Motorisation of Indigenous crafts Experiments to motorise the artisanal crafts in the coastal regions of Kerala date back to many decades, particularly from the inception of the Indo-Norwegian Project in 1963. The indigenous methods of fishing and techniques were thousands of years old and were diverse according to the local sea and the techno-economic conditions prevailing. The efforts for motorising traditional crafts by the authorities were not welcomed until the class struggle took its developed stage in late 1970s, when the artisanal fishing folk found that the adaptation of modern techniques is a grave necessity for their survival. The formation of co-operative societies of fishermen ignited a new class formation, which popularised the group organisation putting an end to the feudal setup. In this process the market intermediaries, particularly the commission agent played the role of promoter. He arranged resources, new technologies, larger and powerful gear and the framework for motorisation.

4.5.2.7.1. Initial Experiments In 1970, under Indo-Belgium Fisheries Project, the fisheries department fitted 100 crafts with out-board engines at Muttom in Kanyakumari district of TamilNadu. In 1974, Marianad Fisheries Co-operative Society in Thiruvananthapuram district initiated a similar experiment. Unlike in Gujarat and the Sourastra coast, these experiments were not successful, which were tried upon by using diesel single cylinder air-cooled engines. The trials with Japan made double-cylinder, water cooled, high speed, and compact kerosene engines, conducted at Purakkad in Alappuzha district and Kannamaly in Ernakulam district, by commission agents showed encouraging trends and within a short period of time the Japan engines were widely accepted by the fishermen of these districts.

4.5.2.7.2. Popularisation of OBEs By 1988, half of the traditional crafts were fitted with out-board engines in these districts. From about 50 engines in 1980, the number has gone up to 10,000 in 1988 and about 35,000 in 1994. Now there are three brands of Japan engines available in the market; Yamaha, Suzuki and

Mariner; having horsepower ranging from 4.5 H.P. to 100 H.P. Today all the Plank-built, 90% of the dugout and 80% of the Kattamarams are motorised and in many districts, there are hardly less than 1% of the crafts are left non-motorised. Thus during the last decade, the traditional sector embraced the machine-power giving up muscle and wind-power forever.

4.5.2.7.3. Effects of Motorisation on Organisation From the outside, it would appear that these new technologies have been superimposed on a system of fishing that remains essentially traditional. In fact, the important aspect of the fishing sector, namely the sharing system, has been retained, without significant changes in the relative shares to capital and labour. Despite retention of this system in principle, more changes have taken place in calculation of net earnings, which affect the returns of workers vis-à-vis that which goes towards capital. Modernisation as the only way to subsistence was the result of the Government's involvement in fisheries since the 50s. These strategies paid dividends in States where the fish workers in the artisanal sector were not as numerous as in Kerala or where the fishing was not as specialised. The fishermen in Kerala, duly supported by the commission agents, were masters of their trade and were able to integrate in a cost-effective manner. The forces of production, i.e. the human labour, nature and inputs in terms of capital and technology were placed in a better arrangement in Kerala. They were probably also aware of the limited resource base on which the large population was to depend. In less than a decade, these modernisation strategies began to boomerang. In fact, the policy suggestions outlined in the study by Platteau entitled "Technology, Credit and Indebtedness in Marine Fishing", (which compares the state of the economy in three fishing areas, namely a Kattamaram area, a vallam area and a mechanised trawler area) highlight this position in the following words: "Two measures need special emphasis. First, research and development efforts ought to be devoted to modernising the traditional technologies that are often well suited to the local natural condition. The motorisation of the Kattamaram is a case in point. What is mainly needed here is a profound change in the attitude vis-à-vis traditional fishermen and their technologies".[20]

4.5.2.7.4. Traditional Organisation In traditional fisheries, the means of production were under feudalistic ownership of some families or persons who provided the craft, gear and accessories to a group normally organised under the leadership of a senior angler. The group leader was to pay either rent for the craft or a share of the sale proceeds of the day in return. This share for rent ranged from 40 to 60 %. The group leader, occupying the role of tenant paid the members of the group a share of the proceeds or wages in return for their labour. Most of these craft owners were not active fishermen and many of them belonged to communities other than fishermen, doing some other profession. However, some fishermen managed to own some small crafts of their own, like Kattamaram, dappa, dingi etc. and elementary gear like small drift nets, hook and line etc. A form of shared ownership was also popular based on the joint family structure in which the operational unit included all the adult male members of the family.

4.5.2.7.5. Changes in Craft and Organisation Following the motorisation, in the northern districts, the most important change during the decade has been the introduction of the ring seine operations, while in Southern and Central Kerala there have been drastic changes in the craft and ownership as well. The large Thangu vallams replaced the local canoes- the fibreglass boats replaced the traditional Kattamaram and with it originated a joint ownership system. This new system became popular in Kerala and other states, which took the form of association or localised groups. Though there was a form of shared ownership to some extent all over Kerala, this new system took the form of an equity holding similar to joint stock companies. The initiative for this movement was primarily the rules of NCDC and the Fishermen Welfare and Development Societies, under which the modernisation finance was restricted to fishing groups. In a short time it went further than mere shared ownership. It took the form of small worker-owned companies with their own rules and regulations. The groups are of about 40 persons bringing shares together and deciding to operate on the basis of division of labour amongst themselves, each being entitled to equal share as returns. All the shareholders are required to go out for fishing. Usually the crew size of the group range from 30 to 35 men recruited on a rotation basis and the others have to be present on the shore at the time of the launching of the craft and when it returns. Those who do not go fishing have to assist with shore activity. However, for a share in the net income of the day, the member has to be present at the shore. There is a captain or leader of the team who is entrusted with the management of the affairs of the group including transaction of money.

4.5.2.7.6. Community Management While increased investment in craft and gear and the involvement of co-operation necessitated changes in the organisation of labour, it did not lead to development of greater community management of fishing. In the early 60s, when the trawlers were introduced in Kochi, after initial operation, the community decided when and where the trawlers would operate. Thus, an agreement was evolved regarding the exploitation of the fish resource to avoid social conflict. But no such social control followed, when the OBEs and the ring seines were introduced.

4.5.2.7.7. Capital Contributions In Alappuzha, the community realised the need for shares while investing in large craft and gear. Fishermen, who could not muster resources either to invest in an engine or to have a share in the new units, engaged their crafts to act as carrier boats to the larger units. They are towed along by the larger units and bring home the catch as the big boat comes back with the huge net and the crew. So while the towed boats do not fish, they share in the profits on one hand and utilise existing resources on the other. It must be noted, however, that shares in investment are by no means equal. Shareholders may have a full share, or a part of a share. This pattern of share-holding has created problems. There are members who have a 1/10 share or even a 1/5 share, but there are others who may have a 1/20 or 1/25 share. This cause big differences when the profit is divided in proportion of 40:60, between capital and labour. Today, there are non-fishing owners also with big shares. Further, the bigger shareholders use the right of employing the labour they like. Many of them employ workers from outside who are experts in operating nets. The local youth feel that they have been deceived in the process. Ironically, at first the fishermen had rejected the idea of introducing the ring seines. But it was the youth that had pushed for it, as it would generate employment, because each unit need 40 workers. Today, the youth are at the mercy of the owners, not having resources for investment.

4.5.2.7.8. Emergence of a Capitalist Class? A comparison of the changes in credit labour relations accompanying trawling and motorisation is useful in understanding the results of the new organisation. Platteau's study in Sakthikulangara showed that when the 32 feet trawl mechanised boats were introduced, 66 percent of the fishing units were introduced by people other than regular fishermen. Of the other 34 per cent, the majority stopped active fishing within a few years. They shifted to a commercial occupation related to fishing that helped them accumulate sufficient assets to put them in a sound financial position. Plateau preferred to call this class "merchant capitalists" as they stood on the verge of being pure financiers and renters[21]. However, changes within the traditional sector have not followed this pattern. All the motorised crafts in Alappuzha District are owner-operated and villages where the ring seines operate, a non-worker owner group has emerged but it is not significant. But, unlike in modern sector, where the incidence of tied loans decreased with the increased investments, in the case of traditional crafts, the role of tharakans, the financier cum auctioneer has become significant. This has had both a negative and positive effect on the borrowers. The positive aspect is that since, either a 5 per cent auction charge or one share of the catch needs to be paid as interest, the principal is returned only when the catches are good, and usually no at all paid. Therefore, the fishermen are willing to risk borrowing large amounts regardless of repayment. The negative aspect is that they are not free to sell catches of their own. However, in general, the tharakans have been able to get the best possible prices.

4.5.2.7.9. Results of the Developments With the introduction of the ring seines, the earlier gear has become out of date. Some families have lost equipment worth several thousands. The traditional family fishing has become group based, giving up all the old family support structures. The individual borrowing has made people highly dependent on the tharakans and merchants who lend money. They say that the merchants have always been assisting them as they provide loans in poor fishing months against the right to auction the fish at 5 per cent commission. In Alleppey, the workers themselves have stopped the night use of ring seines since 1989. They also favour stopping the use of lights while fishing given the excessive amounts of kerosene needed, which has often to be bought on the black market, given the shortfalls in kerosene supply, and thus is a financial drain. Besides, this modernisation is based on non-renewable resources like oil and nylon (for nets). The boats are made of wood that is also becoming a scarce resource. An all-round control of various aspects of fishery alone can prove to be a sustainable alternative.

4.5.2.8. Kerala Marine Fisheries Regulation Act 1980 The Kerala Marine Fishing Regulation Act, 1980 was given assent to by the President of India on the 17th January 1981. It came into force with effect from 24-11-1980.

The Kerala Marine Fishing Regulation Act, 1980 envisages

1. The need to protect the interests of traditional fishermen
2. The need to conserve fish stock and to regulate fishing on scientific lines
3. The need to maintain law and order in the sea

4. The Act empowers

   a. For regulation, restriction or prohibition of fishing within specified areas using specified craft and gear,

   b. for registration and licensing of fishing vessels,

   c. for prohibition of fishing by non-licensed vessels,

   d. for cancellation, suspension and amendment of the licenses already granted and

   e. for imposing penalty for breach of provisions of the Act

5. The Adjudicating Officers will implement the Act and the impounding officers appointed in each region.

6. The District Collector will be the Appellate Authority to dispose of appeals filed before him.

7. The sea along the entire coast line of Kerala State is divided into two zones viz. First Zone - The area from the shore up to 30 metre line in the sea, along the coast line of the State from Kollemcode in the South to Paravoor, Pozhikkara a length of 78 km.

Second Zone - The area up to 20 metre line in the sea, along the coast line from Paravoor South to Manjeswar in the North for a length of 512 km.

8. Mechanised fishing except fishing by motorised country crafts prohibited in the said fishing zones.

9. The Government Notification prohibiting the use of purse seine, ring seine, pelagic trawl, mid-water trawl and bottom trawl in the territorial sea (within 22 km) was quashed by High Court on 9-4-1986.

4.5.2.9. Government Development Schemes Realising that the attempts in creating cooperatives had failed and that efforts for modernisation had led to inadvertent effects, the government tried to make new efforts for supporting the small scale-sector. Even these efforts have been ridden with contradictions and problems, but the final outcome is that in all fishing villages, societies have been formed through which all government funds for development are channelled. The co-operative federation, Matsyafed, supervises these societies and claims to provide new fish marketing channels to free the fishermen from the clutches of merchants and moneylenders. Whereas this reorganisation certainly helps to get a better picture of the facts and figures of the small-scale sector, how far it has achieved its purpose has yet to be studied. It is important to note, however, that the government has created an intricate network to interact with the small-scale sector and that too in the decade of transition.

Table 4.13. INVESTMENTS IN FISHERIES SECTOR - FIVE YEAR PLANS

(Rs. in crores)

Name of Plan		Total State Plan Original Outlay	Actual Expenditure	Fisheries Sector Plan Original Outlay	Actual Expenditure	Percentage of total
First Plan	1951-56	30.00	25.90 (86)	0.15	0.03 (20)	0.50
Second Plan	1956-61	87.00	80.22 (92)	0.93	0.65 (70)	1.06
Third Plan	1961-66	170.00	182.31(107)	4.50	3.35 (74)	2.64
Annual Plan	1966-69	142.54	144.37(101)	8.78	7.03 (80)	6.16
Fourth Plan	1969-74	258.40	345.76	11.00	5.40 (49)	4.26
Fifth Plan	1974-78	568.96	485.62 (85)	11.60	7.83 (68)	1.38
Annual Plans	1978-80	392.96	428.70 (109)	6.83	6.24 (91)	1.74
Sixth Plan	1980-85	1550.41	2038.23(131)	20.00	20.70 (103)	1.28
Seventh Plan	1985-90	2211.00	2299.22(104)	31.74	29.13 (92)	1.44
Annual Plan	1990-91	635.00	N.A.	11.00	10.29 (94)	1.73
Eighth Plan	1991-96	5460.00	4362.54(79.9)	42.00	N.A.	
Ninth Plan	1996-2001	16,100	N.A.			

(Figures in brackets indicate percentage of expenditure)

Source: Government of Kerala, Department of Fisheries

4.5.2.10. Latest Plan Priorities- Shirking of Further Growth? The strategy for development of fisheries during Eighth Five-Year Plan of the Government of Kerala was designed to lay emphasis on scientific management of the inshore marine resources so as to ensure sustained growth of the sector. The marine fish production was set to be gradually stepped up through a package of measures for conservation and management of the over exploited inshore resources, extension of fishing operations to the offshore and deeper seas also as this was the only way to make big leaps in fish production. Fish production by the end of Eighth Five-Year Plan was accordingly projected to be around 5.30 lakhs tonnes, comprising 4 lakhs tonnes from inshore, 90,000 tonnes from offshore and 40,000 tonnes from inland. This was projected on an average annual growth rate of around 4 percent. The additional production of 1 lakhs tonnes of fish was also envisaged to help in improving the per capita supply for internal consumption to 14.2 kg / annum from the previous level of 9.9 kg. (1987-88).

Programme	**Expected additional catch in Tonnes**
a. Employment of 1,000 vessels of large size for off-shore gill netting and lime fishing etc. at 300 kg/day for 200 trips /vessel	60,000
b. Extension of fishing operations by large motorised country craft to the offshore grounds lying between 50-70m. depth 4000 units at the rate of 20 boat trips per craft at 300 kg/trip.	24,000
c. Deep sea fishing on an experimental basis by introducing dory fishing and deep sea combination vessels.	6,000
Total	90,000

Along with the production enhancement efforts, fishermen welfare schemes, as well as programmes for cooperativisation of fishermen were also designed for promoting the economic well being of the fisher folk. In order to achieve the projected production level, a multi-pronged approach was suggested viz.

i. Conservation and Management of Inshore Resources

State enforcement of KMFR Act along with introduction of unified Inland Fishery Act was envisaged for conservation of resources. Deployment of excess Fishing efforts to offshore seas were suggested be encouraged, including facing out of excess mechanised boats.

ii. Exploitation of the offshore Resources:

The offshore and deep-sea resources are estimated to be of the order 4 lakhs tonnes. According to CMFRI, of this, about 2 lakhs tonnes are supposed to be accessible for exploitation in the next 10 years. During the VIII Plan, half of this potential was targeted to be tapped. The following were the programmes suggested for the purpose.

iii. Improvement in Captive Fishery Management as well as aquaculture of fish / prawns, including regulation of fishing in back waters would yield 40,000 tonnes - an addition of 10,000 tonnes over 1989-90. 5203 Plan schemes were drawn out in conformity with these policy guidelines.

For successful implementation of plan programmes, the following measures were also suggested to be taken

(i) All Existing mechanised boats should be registered and new registration may be suspended for period of 5 years. Excess fishing vessels operating in the inshore area many be deployed to the offshore fishing purpose, and simultaneously old vessels should be phased out over a period of time. Indiscriminate uses of power propulsion and mesh size of gear may be regulated.

(ii) Enforcement of Kerala Marine Regulation Act may be strictly effected.

(iii) A unified Inland Fishery Act may be introduced.

(iv) The Land Use Act may be suitably amended, so as to permit the use of water bodies for aquaculture.

(v) All major estuaries may be declared as fish sanctuaries.

(vi) Attempts should be made to exploit the hitherto unexploited resources.

(vii) The Pollution Control Board may be moved to take appropriate action for water pollution control measures in the water bodies.

(viii) Evaluation study in the following cases may be conducted.

i. Functioning of FFDAS and BFDA Ernakulam.

ii. Landing Centres for mechanised boats, and

iii. Workings of guide Lights already completed.

(ix) A market Regulation Act may be introduced.

(x) A Fishery Resource Management Council having representation of the following sections may be constituted to advice the Fishery Management Cell in the Directorate.

i. Fish Workers

ii. Fishery Scientists

iii. Fishery Policy makers

iv. Fishery industrialists/traders

v. Coastal area people's representatives

vi. Enforcement Authorities.

vii. Voluntary/Research Organisations, etc.

Thus, on analysis of the Eighth Plan proposals, we can see that the Government has taken a cold approach to the development of fisheries on ground of preservation of ecology and pollution control. [22]

4.6. TRADITIONAL FISHERIES - STRUCTURE

4.6.1. Fishing Equipment

4.6.1.1. Crafts The traditional fishing sector largely uses crafts that are appropriate to the local sea and the nature of gear used. As a result the crafts are different from centre to centre. In Kerala, Kattamarams were very popular in the southern districts, where the sea is uneven with rock and reef formations. In central Kerala, where the shoreline is smooth and free of rocks and reefs, plank built canoes are popular. In the northern districts, dugout canoes are the most effectual crafts.

4.6.1.1.1. Kattamaram For centuries, the most predominant craft of this sector was Kattamaram. The early motorisation experiments were to propel this native craft. But, today when the sector almost succumbed to motorisation, the Kattamaram is also becoming the part of history. Kattamarams are made of 3 to 5 lengths of solid soft timber and are having a span ranging from 3 to 7 Meters. These wooden dowels are bound together with coir to form the shape of a canoe. It is normally one man operated craft and the tackles are small cast nets, hooks and lines, drift nets etc. The average voyage time is 4 – 8 hours and the target species include Sharks, Seer fish, Mackerels, Tunnies, Cuttle fish etc.

4.6.1.1.2. Dugout Canoes This are made of medium hard wood and is carved from a single piece of wood. Normally their length ranges from 10 to 15 Meters. It is called Odam, Vanchi, Thoni etc. locally. In the Canara and the Konkan coast, these dug out canoes are fitted with an extra wood log on one side to protect it from out-turning. The crew strength of Dugout canoes range from 2 - 18 people and the fishing gear is commonly the Drift nets. Hooks and lines, Cast nets, Seines etc. are also widely used. The crafts are propelled by one OBE having 7.8 – 25 HP. The average time spent for fishing is 18 hours and the target species are Seer fish, Mackerels, Tunnies, Sardines etc.

4.6.1.1.3. Plank Built Canoes These are made of planks of hard wood having thickness ranging from 2" to 6" The planks are darn together with coir or nails and are fashioned to cut through water effortlessly. These planks built boats are of wide variety made for diverse operations with length ranging from as small as 3 Meters to huge sizes of about 40 Meters. The basic advantages of such canoes are that they are light in weight and much cheaper than dug-out canoes. Therefore such canoes are widely used for beach landings and are easily manoeuvrable for all weather operations. With reference to the gear used, the plank built canoes are called Thangu vallams, Chooda vallams, Neetuvala vallams, Choonda vallams, Muri vallams, Dappa vallams, Dingi vallams, Kamba vallams etc. Thangu vallams are the biggest crafts having hullage up to 20 tonnes and 26 seat planks or padis with a length up to 40 Metres. It uses encircling nets, a modified adaptation of Purse-scine. Prior to motorisation, the size of these boats were small, with smaller hullage but of similar length. About 20 - 40 persons venture in to the sea on this type of crafts as the gear used in these crafts are very large and heavy. Two or three OBEs with 25 40 HP each propel the canoe. Winches fitted with Diesel engines are used to manage the recovery of gear cast. The fishing time range from 4 - 24 hours and the target species range from prawns to Pomfrets.

4.6.1.1.4. Thangu Vallams In Alappuzha District, the study conducted on the size and cost of canoes reveals some interesting events that took place during the period of motorisation. Before motorisation, when the boats were propelled by man power and wind energy, were designed to carry maximum 26 to 30 persons with a hullage of less than 4 tonnes. Then the gears were also simple weighing not more than 250 Kgs. In 1978 a 21 padi Thangu vallam was having a price of Rs. 12,000/- only. In 1981, the initial year of motorisation, it rose to Rs. 30,000/- and in 1999 it was about Rs. 3,20,000/-. With the increase in cost, the design of the Thangu vallams also became different. Today, such a canoe is having a length of more than 30 Metres, width in the central part of about 3 Metres, a depth of about 4 Metres and a hullage of more than 15 tonnes. Physically such canoes are difficult to be taken off the sea, as it was the practice earlier. As a result, these big crafts are either anchored in the sea behind the surf zone or are driven into the estuaries for safer berthing. This practice of keeping the canoe continuously in water has resulted in lack of judicious and appropriate maintenance, leading to lesser life period and heavy depreciation. During 1980s the average life of a Thangu vallam was about 12 years; now it is hardly 4 years. Another reason for the reduced life of the canoe is the speed of the craft, with the full propulsion of two outboard engines with a total power of about 50 to 100 H.P. The heavy splash of the craft over the waves with its huge weight could be another explanation. However, the very strong crafts costing more than 2 to 3 lakhs rupees are scrapped within a few years, which require more scientific studies, at the earliest.

4.6.1.1.5. Chooda Vallams Also known as Disco vallams are medium sized canoes, smaller than Thangu vallams but larger than Neetuvala or Choonda vallams. These crafts also use encircling nets, of smaller length, but of lowest mesh size. These crafts are primarily used for catching Anchovies and White baits, the smaller varieties. Normally, the length of the canoe is not more than 10 Metres and has 14 to 16 cross planks or padis to accommodate a crew of 18 to 22. The hullage is hardly 6 tonnes, usually propelled by one out-board engine of not more than 25 H.P. The cost of such a canoe was Rs. 8,000/- in 1978, 16,000/- in 1981 and Rs. 1,50,000/- in 1999. No considerable diversity has been noticed in the design of Chooda vallams following the motorisation, as in the case of Thangu vallams.

4.6.1.1.6. Neetuvala Vallams These are smaller canoes with a length of not more than 8 Metres and have 8 to 12 padis with a crew capacity of not more than 6 persons. Such canoes use drift nets, gill nets or line and hooks etc. These crafts are propelled with one out-board engine, normally of lower power like 4.5 H.P., 7 H.P., 9.9 H.P. or a maximum of 15 H.P. The cost of such a canoe was Rs. 5,000/- in 1978, 10,000/- in 1981 and 50,000/- in 1999. Compared to Thangu vallams or Chooda vallams, these canoes are very few in the district. Motorisation has in no way affected these crafts in respect of its design.

4.6.1.1.7. Fibre Glass Boats These are the new generation crafts introduced by CIFT and Department of Fisheries to substitute Kattamarams and smaller crafts like Dappa, Dingi etc. The maximum length of the craft is 22 feet and the hullage is less than one Ton. Built by using plywood to cover the wooden or steel structure, these crafts are coated with a thin layer of fibre glass to prevent contact with water. Thus they are also called 'ply vallams'. The typical gear used from the craft is hooks and lines of drift nets, both used for fishing in high seas. The cost of such a craft is about Rs. 18,000 and a team of two to three crew use it for venturing in to sea. OBE of 4.4 to 15 HP is used to propel the craft. The craft is not popular in the district and the only group using it is the traditional high sea going fishermen called 'Valayottakkar'.

4.6.1.1.8. Mini Trawlers The latest and trendy class of canoe in the district is the Muri vallams or the Mini trawlers. The economic failure of big canoes that were in collective ownership is cited as the reason for the innovation of Mini trawlers, which are relatively the cheapest craft and gear combination. The shape of the craft is like a half of a medium plank built craft cut into two pieces, with an 'aniyam' (fore end) and without 'amaram' (back end). In fact, many of these Muri vallams are built of scraps. These crafts are used to trawl the immediate coastal waters up to a depth of 20 Metres. Demersal species like, prawns, soles etc. are the target catch. The asserted advantage of the Muri vallam is that it is the only craft, which need minimum capital investment and can be operated by 2 persons. The operators claim that these vallams are the most profitable as they offer maximum probability. The Fisheries Department and the Government have not recognised the craft yet and there is difference of opinion regarding the trawling activity of these crafts. The cost of a newly constructed Muri vallam is Rs. 40,000/ and that assembled from the scrap of a big canoe is around Rs. 22,000/-. An out-board engine of medium capacity of 9.9 - 25 HP is used to drive these crafts. Since they are plying in the coastal waters only, unlike the bigger crafts, the engines used by these crafts are of older models or those which are not good enough to be used in the big crafts, which go far in to the sea.

4.6.1.1.9. Inboard Thangu Vallams These are the latest generation crafts introduced by the traditional fishermen of Alappuzha. These giant crafts are fitted with 120 HP Diesel Marine Engines, designed for mechanised trawlers. With a length of about 56 feet, these crafts afford a hullage of about 22 tons. Economic performance, manurability, safety and reliability are the special features of these crafts, which can be used for any sort of application and at any depths. The running cost of the craft is considerably low, compared to those using OBEs. The limiting factor for popularisation of the craft in its initial investment. These are not beach landing crafts and for effective operation there is the need of more fishing harbours. At present there are only three crafts of this category in Alappuzha district.

4.6.1.1.10. Non-Motorised Crafts There are a few canoes of very small size, which are left un-motorised in the district, belonging to traditional classes like Dappa, Dingi etc. Propelled by paddles by two or three crew, these crafts venture in to the sea to trap a variety of species by using a modern drift net made of propylene monofilament, locally called 'Vysali vala' These tiny crafts are also plank built costing around Rs. 15,000/- only. Amidst all developments and commercialisation, these crafts continue to occupy the position of subsistence craft, requiring negligible capital and little working funds.

4.6.2. Fishing Gear During the last two decades, sweeping changes took place in the technologies of gear used by the traditional fishing sector. In early 70s, the sector was using small nets indigenously knit at heir home. During those days, the traditional fishermen houses were small net factories. The tackles were knit by using conventional natural fibres made of cotton, silk, hemp, flax etc. The nets so woven were purchased by itinerant traders, who supplied the same to those who needed them. The local festivals were market places for the nets, and the women folk were seen taking their products, which were sold within hours, bringing them enough money to rejoice. Traders and fishermen from distant places used to visit the festivals to buy the nets. (The annual fete of the famous Arthunkal Church is an example.) A wide variety of tackles like Basket net, Dip net, Cast net, Trap net, Gill net, Trawl net and even Seines like Danish, Beach Scine and Purse Scines were available in the local markets. Net manufacturing was the primary source of income for the fisherwomen and was an off-season occupation for the fishermen.

4.6.2.1. New Net Technology During the late 70s, traditional fibres began to be substituted by synthetic twines like Nylon, Polymer, Poly-ethylene monofilament and Poly-ethylene tape. The modern fibres were highly advantageous than the local ones, since the traditional fibres were easily spoilt as dehumidification was difficult after every use and the moisture on the fibres easily damaged it. The synthetic twines do not have such problems and is too light compared to the orthodox strings. The synthetic twines are very thin and vulnerable that it is difficult for the traditional knitters to weave net out of it. Therefore they subsided to the factory made ready-made nets of different mesh sizes, giving up their subsidiary occupation of net weaving. Today, the only task for the fishermen is to join together the ready-made nets to produce shapes to suit their requirements, which is only a simple task. Thus the emergence of synthetic twines resulted in total ruin of the subsidiary occupation of the fishermen households and their self contained professionalism.

4.6.2.2. Thangu Vala Thangu vala is the most popular fishing gear in the district. It is the tailored version of the Purse Scine net used by the mechanised boats. Except for the length and width, the Thangu vala is very much like a Purse Scine. On the other hand it is a developed form of traditional koru vala, formerly used by the Thangu vallams. The target species are the oil-sardine, sardine, Mackerel, squalid-prawns, Pomfrets etc. which are Pelagic varieties. The method of operation of Thangu vala is simple. It is an encircling net having a circumference varying from 400 to 1000 Metres. It was first introduced at Alappuzha coast in 1985. In Alappuzha and Kollam districts it is operated from one canoe, while in Ernakulam district two canoes are used, one as carrier and the other as the casting craft. In the northern districts the Thangu vala is called Rani Vala and is operated from a team of four crafts. The ring scine, popularly expressed as Thangu vala, Mandu vala or Rani Vala is made of a long wall of netting with head rope and foot rope. Usually the net has four mesh sizes. Along the head rope and the foot rope, larger mesh nets of about 65 mm to 72 mm are used at a breadth of about 10 to 18 cm. It is followed by 18 mm or 20 mm mesh nets up to a width of 16 to 40 Metres, so that when vertically cast the net touches the bottom of the sea, preventing the shoal from escaping through the bottom of the net. The headline is fitted with floats at every 10 feet, made of synthetic balls and the footrope with lead weights for every foot. In addition the footrope will have rings made of coast-iron or brass at an interval varying from 5 to 10 Metres through which a 'purse-line' rope is passed, pulling of which will close the foot line after casting the net around the shoal. On closing the bottom by pulling the purse-line, the net takes the shape of a basket, trapping the entire shoal. The technique adopted in the operation of this net ensures that the fish shoal is surrounded both vertically and horizontally. On detecting a fish shoal, the craft increases its speed to go ahead of the shoal, then drops one end of the net and swiftly casts out the rest and encircles the shoal.

4.6.2.3. Chooda Vala or Disco Vala Chooda vala is identical to Thangu vala except for the mesh size in the central part of the net, which will be as small as 6 mm to 12 mm and the target species are Anchovies, White baits, and squalid-prawns, which are smaller in size. Because of the small mesh size the net is heavy and consequently the length of the net will be about 250 to 500 Metres only. Technique and operation of this gear is very same as that of Thangu vala but is operated from smaller crafts with a crew of 18 to 25.

4.6.2.4. Mini Trawl Nets Mini Trawlers use trawl nets of small size, weighing 3 to 7 Kgs. The technique of trawling is very same as that of mechanised trawlers, except for the depth of operation and speed of the craft. The nets are of two-seine type fitted with autor boards and tickler chain. The conical shaped net is pulled along the bottom of the sea with the mouth wide open. A pair of autor boards, positioned to widen the net mouth along the sea bed while pulled through water facilitates it. The tickler chain connecting the boards manipulates the bottom soil in front of the net forcing demersal fish to come out. The speed of the trawl net traps fish in to the net and the tail part of the net, termed the code end, collects them in its bag like belly. The autor boards are made of rectangular flat timber and steel weighing 7 Kg each. The cost of a pair of autor board is Rs. 2,500/- net of 3 Kg. Rs. 1800/-, Tickler chain Rs. 350/- and cost of rope, float and other accessories comes to Rs.1,500/- bringing the total cost of the gear to Rs. 7,150/- only.

Table 4.14 FEATURES OF DIFFERENT CRAFT-GEAR COMBINATIONS

Particulars	Thangu Vallam	Chooda Vallam	Mini Trawler	Gill Net
Hullage (Tonnes)	6-10	4-6	2-3	1-3
No. of Crew	26-40	18-25	2-4	2-7
O.B.E. HP	25/40x2	15/25x1	9/15x1	4.8-15x1
Journey Time	2-6 Hrs.	2-6 Hrs.	NIL	6-12 Hrs
Fishing Time	2-10 Hrs.	1-10 Hrs	3-6 Hrs	6-24 Hrs
Gear Used	Ring-Scine	Ring-Scine	Trawl-Net	Gill-Net
Length of Gear (Meters)	600 to 1,000	250 to 600	3 to 7	500to 1,000
Webbing in Kg.	400 to 700	300 to 700	1 to 4	100 to 250
Depth of Operation (Metres)	15 to 50	10 to 40	2 to 15	40 to 150
Target Species	Sardine Mackerel	Anchovies Whitebaits	Prawns Soles	Mackerel Shark

Source: Primary Data

4.6.2.4. Gill Net, Hooks and Line Gill net is used to trap bigger varieties of fish like Mackerel, Tuna, Seer, Shark, Pomfrets, Skates, Lobster etc. These nets are made of nylon twines or monofilament poly-ethylene. The introduction of synthetic twines and the motorisation of crafts have altered the gill net operation much and today it is emerging as the most useful fishing method. The gill net operation is carried out at high seas during the calm months of the year. To trap different species of fish, gill nets of different mesh sizes ranging from 70 mm to 300 mm are used. The area of operation starts from immediate sea to depths up to 150 Metres. The gill nets are long vertical webbing having width of about 3 to 10 Metres. The length of gill nets range from 600 to 1,000 Metres and is cast in its full length with orientation to the currents of the sea. The net may be cast close to the bottom of the sea, middle waters or on the top waters to catch different varieties of fish. The top line of the net is fitted with floats and the bottom line with lead weights to hold the net vertically in the water. The floats and weights are balanced to choose the level of water where the net is to be stationed. The harvest is collected after 8 - 24 hours and the crew remain in the crafts after casting the net. The headlines are connected with floats of bigger size to which flags or lamps are attached to signal the passing vessels of the net. Even then, there are many instances of the nets being spoilt by the vessels. The cost of the net with its accessories ranges from Rs. 15,000/- to Rs. 5,00,000/- depending on the mesh size and length. This fishing is seasonal, but a sea daring work. The fishing time ranges from 12 to 36 hours with journey time of about 6 hours.

4.6.2.5. Other gears With the popularisation of Ring-Scine gear, the relative importance of other conventional gears like beach scine, boat scine, gill net, hook and line etc. began to diminish from the late 80s. Today there are only very few beach seines in the district. The conventional boat scine called the koru vala has totally vanished. The construction of sea wall is pointed out to be the main reason for the withdrawal of beach Seines. Further the coastal waters do not have enough fish wealth to make the beach scine operation profitable. The following table gives a picture of the relative importance of gear used by the fishermen since innovation of ring scine in 1985.

Table 4.15 SHARE OF LANDINGS BY DIFFERENT GEARS (KERALA)

Year	Total landings (Tonnes)	Ring Scine (Tonnes)	% of Total	% in Traditional Catch		
				Ring Scine	Boat Scine	Others
1986	3,82,791	22,498	6	12	64	24
1987	3,03,286	31,558	10	28	43	29
1988	4,68,808	81,886	17	36	38	26
1989	6,47,526	2,70,903	42	71	13	16
1990	6,62,890	2,57,853	39	66	11	23
1991	6,64,161	2,28,330	40	74	8	18

Source: R. Satyadas, K.K.P. Panicker, K.P. Salim, *An economic evaluation of Ring scine fishery along Kerala coast*, CMFRI, Kochi. 1992

4.6.3. Out-Board Engines (O.B.E.) Experiments for motorisation of indigenous crafts date back to early 60s, when the Indo-Norwegian Project was in its pilot study stage. Then, the experiments were to modify the crafts, so as to fit it with in-board engines, which were not successful. In 70s attempts were made for motorisation of traditional crafts in the southwest coast of India. In 1970, under Indo-Belgium Fisheries Project about 100 boats were fitted with out-board engines at Muttam of Kanyakumari district.[23] In 1974, the Marianad Fisheries Co-operative Society in Thiruvananthapuram district initiated a similar experiment. But these trials were not successful. In 1976, Greaves Lambadini Company supplied some 15 diesel out-board engines free of price to fishermen at various centres of Alappuzha and Ernakulam Districts. This too was not accepted by the fishermen folk as the engines were not handy and convenient. Trials conducted at Purakkad in Alappuzha District and Kannamaly in Ernakulam District by using imported kerosene out-board engines showed encouraging results by the end of 1980. The changes in the socio-political environment also helped much to peruse the fishermen folk to accept the Japanese out-board engines, which were first imported by an Ernakulam based firm for tourist and defence purposes. Different from Indian made diesel single cylinder air cooled general purpose engines these high speed double cylinder heavy duty petrol / kerosene engines were having the advantages of compactness, very high pick-up simple operation etc. Further these engines are specially designed for marine and backwater motor sports. The installation of these engines on the traditional crafts is simple. By bolting up a crossbar with the side plank of the craft, usually enforced with steel brackets facilitate the mounting of the engine. These engines are having a reverse gear also which makes the boat safe and provides high efficiency for berthing in narrow spaces. Initially the Japan made out-board engines were introduced by the Feudal fishing fleet owners of Alappuzha district. The success of the crafts fitted with the OBEs in making efficient and profitable catch without much manual labour attracted other small owners also. The commercial banks and other financial institutions were ready to give loans under I.R.D.P. and other schemes for the procurement of engines. In 1983 the government announced subsidies also on the purchase of engines. Thus the motorisation took momentum by the mid 80s and the number of motorised crafts rose to about 10,000 in 1985 from 50 in 1980. The incorporation of an apex society for the development of traditional fisheries called the MATSYAFED and the encouragement given by the fisheries department, the traditional fishermen formed groups and societies for the procurement of the engines. As a result the traditional style of fishing by crafts owned by the feudal lords was replaced by co-ownership and fishing on co-operative lines. The innovation of ring scine nets and the provision of subsidised loans for the purchase of bigger crafts, engines and costly ring scine nets restructured the traditional sector very quickly.

4.6.3.1. Growing Unhealthy Competition The late 1980s were days of acute competition among the fishermen in expansion of craft, gear and engine capacity etc. for maximising catch. The sudden depletion of fish stock only acted as a catalyst in this process. If a craft fails to make catch for two or three days consecutively, the crew found fault with either the smaller size of the gear or the lower capacity of the engine. Consequently, the units were forced to enlarge the gear or to acquire a new powerful engine on the following day itself. Evidently, crafts with larger gear and powerful engines were more efficient also. Large ring Seines were able to trap much larger shoal than the smaller ones; powerful engines were successful in reaching the shoal leaving behind other crafts and in bringing the catch at the earliest to the landing centre, where the first to bring would get better price. Naturally the growth of size of the gear necessitated bigger crafts also, since a 1000 Metres ring scine could trap fish enough to load at least 5 crafts of 10 Tonnes of hullage each. When the fishermen were forced to leave behind the trapped fish just because of the shortage of hullage of craft, efforts were to enlarge the craft and this alternatively resulted in doubling of engines with capacity ranging up to 40 H.P. per engine. Thus as a result of this competition, today there are more than 100 crafts in the district with engine capacity of more than 50 H.P. The following table gives a picture of the competition and resultant expansion of fixed cost since the introduction of out-board engines in 1980.

4.6.3.2. Increasing Costs The motorisation of crafts caused sudden raise in the daily working expenses of the crafts. Prior to motorisation, current expenses were concerned only with refreshments and very low maintenance of nets and gear. Today, expenses for fuel and maintenance of engine are two major items in the current expenses, which has gone up considerably since the cost of fuel and the rate of consumption increased along the enhancement of the engine capacity. The government subsidies and kerosene permits for is limited to engine capacity of 10 H.P. As a result the kerosene quota sanctioned to a unit is far below the actual consumption and therefore the fishermen are forced to buy kerosene from local markets at a price of more than 3 times the permit price. Technically ignorant fishermen are badly exploited by the oil and kerosene dealers.

Table 4.16 - FIXED COST OUTLAY OF A THANGU VALA UNIT

(Rs. in, 000)

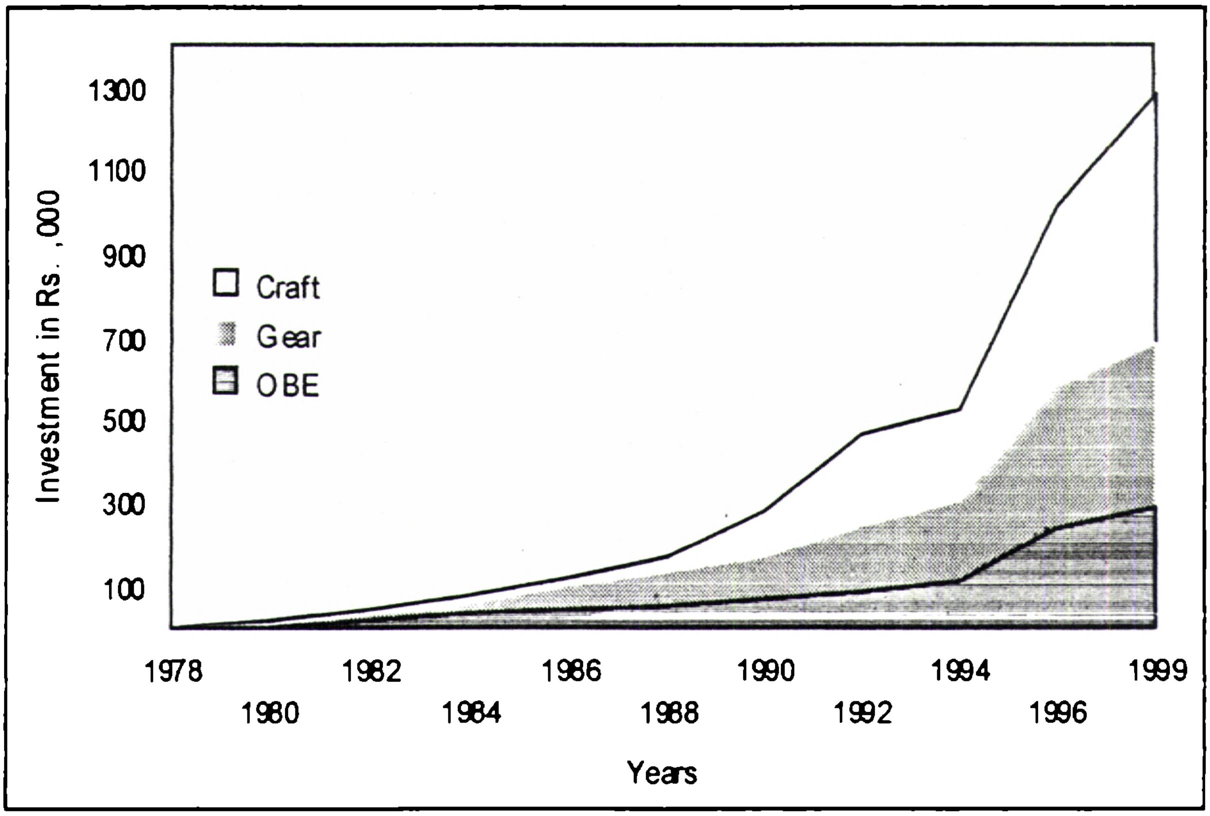
Year	Craft		Gear		Engine		Total
	Tonnes	Cost	Kg.	Cost	H.P.	Cost	
1978	4	12	50	4.5			16
1980	4	16	70	6.5	4.2	11	33
1982	5	30	100	14.0	7.0	15	59
1984	5	44	140	26.0	7.0	19	89
1986	6	55	250	60.0	15.0	20	135
1988	7	68	400	80.0	25.0	39	187
1990	10	85	700	100.0	50.0	110	295
1992	10	100	1000	160.0	80.0	214	474
1994	10	120	1000	200.0	80.0	216	536
1996	15	250	1500	350.0	100.0	425	1025
1999	15	300	1500	400.0	120.0	600	1300
2000	15	350	1500	430.0	120.0	625	1405

Sources: CMFRI Data and Primary Sources

4.6.3.3. Cost of OBE and Servicing The sales and service of engines is under monopoly in the State. Yamaha, the most popular brand of O.B.E. is sold and serviced by an Ernakulam based company, where the fishermen are not permitted to inspect the servicing of the engine. They also complaint that the replaced spare parts are not returned to them and are being fitted again at the price of new ones. The price of spare parts is very high, since the cost of an engine assembled with individual parts would be more than the double of original price of an engine. Suzuki, the second popular brand is sold and serviced by the Apex Society, MATSYAFED. There are no complaints against MATSYAFED service centres, except that there are no ample stock of spares and the delay in execution of service. Here also, the changed spare parts are not given to the owner of the engine. Mariner, the third largest selling engine is sold and serviced by a Kollam based firm, against whom also there are complaints of exploitation. The field study conducted reveals that there are 61 private workshops in the district for the repair and maintenance of OBEs. Many of them are using duplicate spares and are charging price of original imported spares. The fishermen points out that the lack of expert and competitive service centres and the shortage of kerosene are the basic hindrances encountered by the traditional fishing sector. From the study, it is explicit that the cost of servicing of the engine is the exclusive reason for contracting private debts from moneylenders, share subscribers, pawners etc. The need for getting the engine repaired has gradually taken away all their savings.

CHART 4.3 INCREASING COSTS OF FISHING EQUIPMENT

(THANGU VALA UNIT)



Conclusion

Alappuzha district is one among the most prominent areas of Kerala with highest intensity of fishing activities by traditional fishermen. The traditional fishermen of the district nevertheless their social and financial backwardness have adopted the use of advanced technologies like ring scine gear, imported Out Board Engines etc. The introduction of Kerala Marine Fisheries Regulation Act and the adoption of the advanced technologies were the result of their conflict with the mechanised sector. The sector has acquired satisfactory development in procuring income earning assets by adapting advanced technology and costly equipment for fishing activities. Today, due to increasing costs and total dependence on OBEs, the sector is facing crisis.

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CHAPTER 5

FINANCIAL REQUIREMENTS,

SOURCES OF CREDIT AND INDEBTEDNESS OF FISHING UNITS

This chapter contains an enquiry in to the various financial requirements of fishing units and the method and sources of meeting the needs. The extent and share of debts by different debt providers are also evaluated.

5.1. Credit needs Similar to any other sector, the financial requirements of traditional fishermen can also be classified into three types based on the period for which it is required.

5.1.1. Short term credit Fishermen require short term funds for meeting the working capital or for meeting household expenses. For instance, fishing units need funds for buying petrol, kerosene, engine oil etc., for meeting transport expenses, for payment of bata to crew, minor repairs of the craft, gear and engine etc. Further, there are days together in a week, they are hardly able to get enough fish to meet these working expenses. During these days of scanty catch, a minimum amount is required to support their family. On an average there are 150 days in a year without any income at all. Such short-term loans are normally repaid within a period of 12 months. Table 5.1 presents an estimate of average requirements of working capital for different craft gear combinations.

TABLE 5.1 ESTIMATE OF DAILY WORKING CAPITAL REQUIREMENTS

Expense	Thangu vala	Disco Vala	Fibre boat	Mini Trawler
1.Fuel Expenses	5000.00	2500.00	1000.00	500.00
2.Conveyance	2500.00	1000.00	—	—
3.Bata/Refreshment	2000.00	1000.00	150.00	150.00
Total	9500.00	4500.00	1150.00	650.00

Source: Primary Data.

5.1.1.1. Income Probability The probability of getting enough catch to provide divisible income (successful voyages) to various fishing units is worked out below.

a. Thangu vala units

Observed mean successful days of the model unit for the last 5 years = 176

Average attempts made during the last 5 years = 265

$$p \text{ (successful voyage)} = \frac{176}{265} = \underline{0.6641^*}$$

$$q \text{ (unsuccessful voyage)} = 1.00 - p = 1.00 - 0.6641 = \underline{0.3359}$$

Standard Deviation = $\sqrt{n\,pq} = \sqrt{265 \times 0.6641 \times 0.3359} = 7.68$ i.e. 8 days

*Therefore, the probability of getting enough catch is more than the probability of returning without enough income. Thus the fishing in this craft gear combination has been feasible.

b. Disco vala units -

Observed mean successful days of the model unit for the last 5 years = 121

Average attempts made during the last 5 years = 210

$$p \text{ (successful voyage)} = \frac{121}{210} = \underline{0.5761}$$

For this craft gear combination, the probability of getting enough catch is slightly more than the probability of returning without enough income. Therefore this combination cannot be considered feasible as the thanguvala crafts.

c. Fibre boats -

Observed mean successful days of the model unit for the last 5 years = 146

Average attempts made during the last 5 years = 184

$$p \text{ (successful voyage)} = \frac{146}{184} = \underline{0.7935}$$

For fibre glass or plywood crafts, the probability of getting enough catch is greater than the probability of figure of both thanguvala and disco units.

d. Mini Trawlers

Observed mean successful days of the model unit for the last 5 years = 195

Average attempts made during the last 5 years = 218

$$p\ (\text{successful voyage}) = \frac{195}{218} = \underline{0.8945}$$

Therefore, the probability of getting enough catch is maximum for the mini trawlers rendering the combination most efficient.

5.1.2. Medium term credit These are larger amounts required by the fishermen for periods of more than 12 months but less than 36 months. The requirements include finance necessary for making improvements to the fishing gear, large repairs of craft and engine and for domestic ceremonies like marriages, childbirth, death etc.

TABLE 5.2 ESTIMATE OF MEDIUM TERM (ANNUAL) FINANCIAL REQUIREMENTS OF FISHING UNITS @ 1999 PRICES

Expense	Thangu vala	Disco Vala	Fibre boat	Mini Trawler
1.Maintenance of craft	35000.00	12000.00	5000.00	10000.00
2.Maintenance of gear	35000.00	25000.00	15000.00	5000.00
3.Maintenance of OBE	35000.00	20000.00	15000.00	10000.00
Total	105000.00	57000.00	35000.00	25000.00

(Average actual expenses of the model units rounded to nearest, 000)

Source: Primary Data

5.1.3. Long term credit Long term capital requirements are those which require repayment period of more than 36 months. These are needed for the purchase or construction of a new craft, purchase of a new gear or engine, etc. Long-term loans are also required for construction of house, processing and curing sheds etc.[3]

Table 5.3. Estimate of Fixed Capital Requirements of Fishing Units @ 1999 prices

Expense	Thangu vala	Disco Vala	Fibre boat	Mini Trawler
1.Cost of craft	300000.00	150000.00	65000.00	70000.00
2.Cost of gear	535000.00	250000.00	55000.00	15000.00
3.Cost of OBE	825000.00	375000.00	215000.00	175000.00
Total	1660000.00	775000.00	335000.00	260000.00

(Cost of the equipment of the model units rounded to nearest, 000)

Source: Primary Data

5.1.4. Productive and nonproductive Purposes Credit requirements discussed above can further be divided into two, depending on the application of funds viz. productive and unproductive. The former includes requirements to buy craft, gear, engine; maintenance of assets, working capital etc. and the latter includes all other expenses for consumption, ceremonies, religious functions etc. Even though finance is available from institutional sources, it is understood that for both productive and unproductive loans there is the practice of seeking from other sources, who are charging very high rates of interest. Large amounts of loans are also necessary for housing purposes in this sector, since there is lack of proper housing and sanitation.

5.2. Sources of Credit There are a number of agencies and institutions in this sector to finance the credit requirements. Broadly these sources can be classified into two; as institutional sources or organised sector and noninstitutional or indigenous sources. Indigenous credit sources are, Commission Agents, Share subscribers, Indigenous Banks and Moneylenders, Religious Institutions, Friends and relatives.

5.2.1. Institutional Sources of Credit Institutional credit sources include, MATSYAFED, Commercial Banks, Agricultural Development Banks, Primary Co-operative Banks, and registered Mutual funds, Chit funds etc.

5.2.1.1. Co-operatives During the early 1960s, the Food and Agricultural Organisation (FAO) of the United Nations Development programme (UNDP) declared that co-operation is a best means of reducing inequalities in development[1]. It was suggested as the most useful weapon for introducing new inputs and techniques. Thus, co-operation became an imperative system for fishery development. FAO has organised fisheries projects for the development of small-scale fishery and fishermen all around the world through Co-operatives. FAO, in the report commented that, "Co-operatives appeared to offer the best means for assisting fishermen" Due to its own serious obstacles, this was not an easy task. FAO found that the classical European Co-operative systems would fail in small-scale fisheries in developing countries unless they are adapted to local realities. Following this argument, a new school of thought was developed in this field, which stresses on community fishery centres. This approach insisted that development solutions must suit to the purpose and features of the location. It also insists for group planning and group action in performance of credit and marketing, collective bargaining for social justice etc. World Bank suggested formation of co-operatives in this line for the development of fisheries sector.

5.2.1.1.1. Global Experience In the global experience, many co-operatives have been marginally successful; while majority suffer from economic weakness, lack of services, corruption and other serious problems. Co-operatives have not been able to manage fishing activities efficiently in many countries. There has been no ideal and wholesome involvement of fishermen in these co-operatives, which was the major reason for failures[2].

5.2.1.1.2. Fisheries Co-operatives in India In India fishery co-operatives predominantly depend upon the Government. There is no sincere association of fishermen in their cooperatives. The want of fishery co-operatives was felt because of the perishable nature of fish, which cannot be stored without intricate infrastructure for processing, storage, freezing or drying. These require enormous initial investment. In India there may be three tire fisheries co-operatives structure, namely National Fisheries Co-operatives Board, District Fisheries Co-operatives Federation and Primary Fisheries Co-operative Society. There is much scope for establishing category-wise co-operatives also viz. Fisheries Co-operative Finance, Capture Fisheries Co-operatives, Fisheries co-operative Marketing, Fisheries co-operative processing etc.

5.2.1.1.3. Fisheries Co-operatives in Kerala Kerala has a long record with fishermen co-operatives. The Princely State of Travancore-Cochin had initiated the establishment of fishermen co-operatives as early as 1917 and by 1933, 95 societies had been set up. These co-operatives were, however not effective as they were not to protect the fisher folk from the depredations of merchants and middlemen (Kumar 1988). In independent India also the Government of Kerala is the first state to recognise the need for setting up fishermen co-operatives for improving the conditions of fishermen and to enact legislation in this direction, the Kerala Fishermen Welfare Societies Act 1980.

5.2.1.1.4. Evolution Initially, in 1981, 87 Fishermen Welfare Societies (FWS) were formed to ensure the welfare and development programme intended exclusively for fishermen. Subsequently, some 222 FWS were organised rather hurriedly all along the coast covering the entire population of active marine fishermen. The FWS so organised, however, remained more or less dormant until the Kerala State Co-operative Federation for Fisheries Development Limited popularly known as MATSYAFED was set up in late 1984 and took up the task of reorganising them into Fishermen Welfare and Development Co-operative Societies (FWDCS).

5.2.1.1.5. Organisation Structure of Fishermen Co-operatives There are two apex organisations at the state level- MATSYAFED and the South Indian Federation of Fishermen Societies (SIFFS) that are engaged in organising and assisting fishermen co-operatives in the state.

5.2.1.1.6. MATSYAFED The Kerala State Co-operative Federation for Fisheries Development Ltd. No. (T) 738, known as MATSYAFED was incorporated on the 19th of March 1984 as the Apex Federation of Fisheries Development Co-operative Societies of the state as required by the National Co-operative Development Corporation (N.C.D.C.). Prior to the incorporation of this apex federation, even though there were 451 fish producers, 15 marketing and 91 credit societies with an apex society at Ernakulam, no grants or financial accommodations were available from the N.C.D.C. Many of these societies were promoted and registered for the purpose of availing the benefits of the multilateral fisheries project. At the time of inception of the federation the number of societies active and affiliated to the federation was 196. Initially the federation was having only 5 district offices, which is at present 9, covering the entire coastal districts of the state. In 1987, the number of affiliated societies was reduced to 81, distributed all over the 9 coastal districts. In December 1993, 222 new societies were formed on the village level and given affiliation raising the total number to 291. The Authorised Share Capital of the Federation is Rs. 100 lakhs, of which 50% is held by the State Government. The federation started functioning on 21-6-1984 with its Head Office at Thiruvananthapuram.

Administration It is managed by a Board of Directors consisting of 19 members, of whom 11 members are elected from among the representatives of the affiliated Societies, 3 nominated by the State Government and 5 are Government Officials. There is an elected full time chairman. A Managing Director is appointed as the administrative head of the MATSYAFED. The Managing Director is assisted by a General Manager and a team of six Executives, two Accounts Officers, one Assistant Manager, Personnel, one Assistant Executive Engineer and one Assistant Engineer. At the district level, seven District Officers look after the fisheries development works of the maritime districts and at the village level Project Officers (PO) are responsible for implementation of fisheries development programmes. The Project Officers are ex-officio Secretaries of the PFCS. The Directorate of Fisheries implements programmes of fisheries development in nonmaritime districts of the state. At the district level, District Fisheries Officers assisted by field staff who are responsible for execution of such programmes.

Functions The MATSYAFED has a clear mandate of co-operativisation of traditional fishermen and spearheading of development programmes for them. It has a three-tier structure with Primary Fishermen Co-operative Societies (PFCS) at the village level, district level offices, and the state level federation. The main activities of the MATSYAFED include organisation of the PFCS, procurement of fishing equipment and inputs, establishment and operation of manufacturing facilities such as net factory and ice plants, implementation of fisheries development programmes through the PFCS and development of infrastructural facilities. The PFCS distribute to their members production inputs and equipment such as kerosene, nets, outboard engines, and spare parts, disburse loans and collect loan refund instalments, and arrange for sale of fish catch of their members through auctions.

The MATSYAFED provides managerial subsidy to PFCS for the first five years on a tapering basis 100% in the first two years, 80% in the third year, 70% in the fourth year, and 50% in the fifth year. The main task of the district level offices is to facilitate the flow of funds and inputs to the PFCS.

Achievements Since its inception, the federation is receiving financial assistance from the N.C.D.C. Plans for sectorial development of the traditional small scale fisheries are prepared by the N.C.D.C. for each state separately and funds are made available to the respective apex federation to bring out the desired development project. Matsyafed received financial assistance from N.C.D.C. in three phases; 1st phase in 1984, 2nd in 1987 and the 3rd phase in 1991, under Integrated Fisheries Development Programme (I.F.D.P.). Under the three phases the federation was able to allow loans amounting to Rs. 24,07,22,420 to the traditional sector I. The assistance under 1st phase of IFDP amounted to Rs. 4,05,55,148 which was distributed in 4 districts namely Thiruvananthapuram, Ernakulam, Kannur and Kasargode. In the 2nd phase, an amount of Rs. 8,03,67,627 was distributed in those districts where the 1st phase loans were not distributed. Under NCDC 3rd phase, an amount of Rs. 11,97,99,645 was sanctioned for the development of small-scale fisheries of the state. Over and above the NCDC schemes the federation gave away loans for the development of fisheries sector under various schemes namely Flood Relief Scheme (F.R.S.), Housing Scheme, Working Capital Assistance, providing market facilities and by way of issuing Fibre-Glass Beach Landing Craft.

Operation of Schemes The loans are distributed by the federation in the form of fishing inputs like craft, webbings, engine, accessories and an amount in cash to make the gear assembled. Other than financing, the federation is responsible for providing marketing infrastructure, training etc. The Matsyafed is having a net factory at Ernakulam to provide necessary webbings for the traditional sector. Further the federation is the sole distributor and importer of 'Suzuki' Out Board

Engines for South India. The loans sanctioned by the fed for procuring OBEs carry a subsidy of 25%. The fed is having two workshops each in all the coastal districts for servicing OBEs. In addition to the supply of fishing inputs in the form of loans, the fed undertakes the sale of all necessary inputs through a chain of 'Visya Stores' under the management of its district offices. Table 5.4, presents information by district about the number of fishing villages, number of FWDCS, and number of Matsya (Fish) Maveli Stores set up by the co-operatives in the state.

TABLE 5.4. DISTRICT-WISE NUMBER OF FISHING VILLAGES, FISHERMEN DEVELOPMENT AND WELFARE CO-OPERATIVE SOCIETIES AND MATSYA MAVELI STORES IN KERALA, 1990

Sl. No.	District	No. of Fishing Villages	No. of Societies	No. of Stores
1.	Thiruvananthapuram	42	18	5
2.	Kollam	27	12	7
3.	Alappuzha	30	10	5
4.	Ernakulam	21	8	3
5.	Trissur	18	6	1
6.	Malappuram	23	9	2
7.	Kozhikode	34	9	5
8.	Kannur	11	4	1
9.	Kasargode	16	5	3
	Total	222	81	32

Source: *Kerala Fisheries: Facts and Figures* 1990, Government of Kerala, Thiruvananthapuram, 1991, pp. 218-221, 232, and 241-243.

As shown in the table, as of 1990, there were 81 Fishermen Development and Welfare Co-operative Societies in Kerala. In 1990, these were some 31 Matsya Maveli stores in the nine maritime districts of the state.

Actions against Market Intermediaries Over and above, the fed has been trying hard to reduce the grip of intermediaries in the sale of fish, so as to protect the interests of small-scale fishermen. As a part of such efforts, the federation has authorised the local Fishermen Development and Welfare Societies to recruit local young men as commission agents for the crafts financed by fed. The responsibility of conducting the auction and receiving sale proceeds is vested with the commission agent acting for the fed and the agent remits the sale proceeds to the society. The fishing group can withdraw money credited in their name from the society as and when they need it. For these services the society charges a commission @ 5% from which, the agent gets 2.5 % as his share. The society is to appropriate funds to the district office being repayment of loans debiting the account of the group as and when catch is fair enough to do so. The study showed positive sign in this direction. The advantages observed are as follows:

1. The societies become active and the grip of commission agents on traditional sector is beginning to ease.
2. The fishermen have become more responsible and the rate of over dues is coming down.
3. A habit of thrift is being created among the groups, leading to reduction of frequent borrowings from local moneylenders and commission agents.
4. It seems that at least the Matsyafed is able to recognise the special nature of this sector in respect of irregular but rich nature of earnings and adjust the repayment instalments and timing accordingly. The study reveals that about 65% of the borrowers under this scheme are able to pay back the amount borrowed before due date and qualify for subsidy. Many of them are able to close their loan accounts much earlier than the allowed period also.

5.2.1.8. SIFFS (South Indian Federation of Fishermen Societies)

As already mentioned, besides the MATSYAFED, there is another organisation, SIFFS, at the state level that promotes organisation of fishermen co-operative societies in Kerala and TamilNadu. The SIFFS is a non-governmental organisation (NGO) registered under the Travancore - Cochin Literary, Scientific and Charitable Societies Act XII of 1955. The main objectives of SIFFS are to: - organise fishermen into co-operative societies; facilitate the marketing of fish collected by its member societies; assist member societies with funds in the form of loans and grants; establish and run manufacturing units for fishing craft and gear; manage processing units for fish and fish products; and undertake export, import and other activities in the interest of its member societies. The area of operation of SIFFS extends to the whole of Kerala, TamilNadu, Andhra Pradesh and Karnataka. But as of March 1993, its activities were confined to Kollam and Thiruvananthapuram districts in Kerala and Kanyakumari district in TamilNadu only. The SIFFS serves as an apex organisation in the three-tier co-operative structure having District Fisheries Federations at the middle (district) level and primary fishermen co-operative societies at the village level. In 1992, it had three district level federations, one for each of the three districts where it was operating, affiliated to it and 50 primary fishermen co-operatives with total membership of some 6,000. Thus, at present, there are two parallel organisations, MATSYAFED and SIFFS, with almost a similar mandate. The MATSYAFED functions more like a government organisation although de juries it is a co-operative organisation. It suffers from most of the weaknesses that afflict a typical government organisation. Although the SIFFS is an apex organisation of fishermen co-operatives, it itself is not a co-operative organisation. Its major strength lies in organising and educating fishermen and developing and trying new fishing craft and gear. There is no coordination of the activities of the MATSYAFED and the SIFFS and consequently there is a lot of unnecessary duplication of services and facilities and hence wastage of resources.

5.2.1.2. Commercial Banks

Since nationalisation of commercial banks in 1969 and the introduction of integrated schemes for the development of priority sectors, the banking system has been serving the traditional fisheries sector liberally. Keeping pace with national developments in financing the priority sector, both the public sector as well as the private sector banks in this district were able to recognise and finance the fisheries sector, and contribute to growth of the sector.

5.2.1.2.1. Role of Commercial Banks in Fisheries Finance Field studies conducted in this respect reveals that prior to the constitution of Matsyafed, these banks held the major portion of the institutional financing. Out of the 207 branches of commercial banks in the district, 70 branches are situated in the coastal belt, of which 47 branches have been actively assisting the traditional fisheries sector during the past decades. However, comprehensive data are not available in many branches to draw up a fair picture of financing to the sector. From the available data, exact and basic classification of the borrowers is also not possible. Due to the lack of classification of borrowers under priority sector, assessment of credit magnitude to fisheries could not be arrived at. However, from the information available from individual branches, Lead Bank, Regional Offices of banks and Branch performance reports availed from the Head Office of some banks etc., the following data was tabulated and presented to appreciate the magnitude of overdue in financing to traditional fisheries sector. Branch Managers, Development Officers and field staff of many banks were interviewed to draw up an idea on the matter. The general opinion collected from them proves that there is hardly any account which operated satisfactorily and without any overdue.

TABLE 5.5. LOANS STANDINGS OF COMMERCIAL BANKS AS ON LAST FRIDAY OF MARCH 1998

Types of loans	Outstanding accounts (in '000)	Outstanding loans (amount in crores)
Agriculture loans	2631 (81.08)	641.1 (86.03)
Short term	2053	296.6
Medium and long term	578	344.5
Allied Loans	614 (18.92)	104.1 (13.97)
Dairying	162 (4.99)	24.1 (4.58)
Poultry, piggery and beekeeping	22 (0.68)	14.5 (1.95)
Fisheries	11 (0.34)	11.2 (1.50)
Other purposes	419 (12.91)	44.3 (5.94)
Total direct loans	3245	745.2

(Figures in parenthesis shows percentage of the total)

Source: Primary Data

TABLE 5.6 LOANS AND OVERDUE OF BANKS IN FISHERIES CAPTURE LENDING ACCOUNTS (Rs. 000/-)

Bank	Period	Demand	Recovery	Overdue	%
SBT	1982-98	62873	27448	35425	56.34
SBI	1985-97	12019	8625	3394	28.24
CANARA BANK	1980-97	8028	4717	3311	41.23
CENTRAL BANK	1987-96	444	215	229	51.64
IOB	1984-97	218	119	99	45.44
DIST.CO-OP	1980-98	2936	2118	818	27.87

Source: Primary data

Table 5.7 gives a picture of the rate of overdue in some of the branches of public sector banks after writing-off bad debts under debt relief announced by the Government. Under the new asset classification and income recognition norms almost all the accounts are classified as non-performing assets.

TABLE 5.7. STATE-WISE DISTRIBUTION OF OUTSTANDING SCHEDULED BANK'S LOANS ADVANCED TO FISHERIES AT THE END OF MARCH 1998

(Amount in lakhs of Rs.)

States	Account		Amount	
1. West Bengal	798	(7.6)	11.73	(1.05)
2. Orissa	238	(2.3)	4.13	(0.4)
3. Andhra Pradesh	2034	(19.4)	44.66	(4.0)
4. Andaman				
5. Pondicherry	525	(5.0)	6.18	(0.5)
6. TamilNadu	726	(6.9)	217.58	(19.5)
7. Lakshadweep				
8. Kerala	3560	(33.9)	382.06	(34.2)
9. Karnataka	942	(9.0)	148.15	(13.3)
10. Goa	318	(3.0)	79.61	(7.1)
11. Maharashtra	765	(7.3)	139.87	(12.5)
12. Gujarat	240	(2.3)	62.84	(5.6)
13. Others	353	(3.3)	20.1	(1.85)
Total for all India	10499		1116.91	

Notes: Figures within parentheses are percentages of totals.

Source: Special Return on Agricultural Loans -I of Reserve Bank of India, Bombay.

5.2.1.2.2. Present position The study reveals that a major portion of bank loans sanctioned to fishermen are fully secured by mortgage of land and buildings. Out of the 52 samples collected, 47 accounts are secured by mortgage. 31 customers have already received notice of attachment from the revenue authorities. No case of recovery by attachment is reported from any of the 30 villages. The bank officials and revenue officers agree that effecting recovery by way of auction of mortgaged property is not easy, due to the resistance from the local people, of which there are a few instances also. Further, they do agree that the writing off of debts by the Government a few years ago is one of the major reasons for lapse in payment of instalments and the present crises of overdue. However, the field study conducted in this respect shows manifold reasons for the poor performance of repayment position in the fisheries capture lending accounts.

5.2.1.2.3. Reasons for Poor Performance and Over dues The following are some of the major reasons identified for the poor performance in repayment of debts extended by the commercial banks to the fisheries sector.

1. Non suitability of terms and conditions. Verification of the accounts that are closed or are about to close shows that due to irregular payments, the penal interest and bank charges constitute major chunk of repayment, cornering almost double of the amount borrowed. The bank officers agree that timing of instalments for repayment, which is generally half yearly, is not suitable for fishermen. Further, the period of bumper catch also could not be considered for fixing repayment, as it varies from year to year. From the field study, it was observed that during these bumper seasons, fishermen were not persuaded by the officers to make repayment.
2. The Bank officers often maintain that their repeated endeavours to visit the borrower end in vain mainly due to the latter's reluctance to meet them. On enquiry it is understood that in majority of cases, officers visited their dwelling when they were out in the sea. Normal fishing time is from early morning and they have to be on the beach up to evening on all days except Sundays for Latin Catholics and 1st

day of every Malayalam month for Hindus. Officers admit that they cannot go to the houses of borrowers after 4.00 pm. on weekdays or on Sundays. Thus there is a communication gap between them, which is beyond easy solutions.

3. The field study confirms that 54% of the bank loans were availed by the traditional fishermen on advises of either commission agents or political leadership of the locality, who never persuaded them to make repayments. Out of the 37 samples studied, 29 remarked that they have paid bribe also.

4. 76% of the borrowers are of the opinion that the banking hours and the procedures of effecting payment at the counter of banks are hard, which naturally make them to postpone repayment.

5. Even though, the banks sanctioned 85% of the loans, on recommendations of concerned IRD Officer, they never asked his assistance in persuading the borrowers to pay instalments in time. Interviews conducted with the IRD officers tell that, only a few bank officers used to consult them about overdue. They also claim that they were able to persuade the borrowers to make repayment and are successful in majority of cases, which were consulted upon.

6. The banks are used to insuring the equipment hypothecated to them, for which the borrowers were to pay insurance premium. The field study in this topic shows that, in 56% of cases, insurance authorities refused to accept claims, which the borrowers thought to be genuine. This has led to an attitude of contempt among the borrowers leading to denial in payment of instalments.

7. With the formation of Matsyafed and starting of assistance on simple and realistic terms, the fishermen community judge bank loans hostile. Declaration of moratorium and writing-off of debts by the Government gave a notion to the fishermen that they need not pay back the bank loans.

8. Loans sanctioned by the banks were for a very long period, ranging from 8 to 12 years. During this period, the sector underwent incessant changes. The size of craft and gear went up many folds, the small engines were replaced by powerful ones etc., for which banks did not care to provide additional capital. The fishermen

were forced to procure these articles with the help of private credit, for which they had to pay huge returns regularly. This inevitably led to laxity in payment of bank dues.

5.2.1.3. Primary Co-operative Agricultural and Rural Development Banks (PCARDB)

Out of the 5 PCARDBs in the district, 3 banks are in the coastal region and have been contributing much towards the development of traditional fisheries. Alappuzha, Cherthala and Karhikappally are the 3 PCARDBs that are giving loans on long term basis to the fishermen for purchase of fishing equipment. Even though, full data are not available in these banks to assess the magnitude of credit availed by the sector, an evaluation of the overdue accounts makes it clear that about 60% of the lending by Cherthala PCARDB, 47% of Alappuzha PCARDB and 36% Karhikappally PCARDB to this sector are over dues. All these accounts are having collateral security of land and 72 accounts in Cherthala, 49 accounts in Alappuzha and 13 accounts in Karhikappally are already put through the process of revenue recovery proceedings.

5.2.2. Informal or Non- institutional Credit Sources

5.2.2.1. Commission Agents (Tharakan) In traditional fisheries sector, the influence of commission agent is very strong and there is hardly any craft in this district without a commission agent. These middlemen not only act as the auctioneer of fish landed but also finance the fishermen, wholesalers and the retailers. In the traditional marine fisheries sector, commission agency business was started during the feudal craft ownership period. The function of the earlier commission agents were that of managers (Karyasthan) for the craft owner, who had many other assets also like estates, coir retting, fish export etc. Later, due to problems involved in accounting of fish landings, the land lords, handed over the crafts to these tharakans, in return of a fixed rent called 'pattam' The tharakans were to auction the produce and take the proceeds after paying for the labour. During the liberal craft ownership period, they took the responsibility of auction of fish and collection of the share due to the temple or church. It is after the motorisation that the agents started funding in large amounts, taking the form of investment as capital contribution.

5.2.2.1.1. Relation with Fishermen It has become a custom to take an amount as advance from the agent before appointing him as the official middleman for the sale of fish brought ashore by a craft. This practice is very popular in mechanised fishing sector also. Advances by these agents, ranging from a few thousands to lakhs bears no interest and the owners of the crafts treat it as a security deposit rather than a debt. Usually this amount is refundable only on the termination of his agency. Although this practice of taking deposits from tharakans has been there from the very early days, with the onset of motorisation, the magnitude of amount and terms of advancing underwent many changes. Before motorisation, amount of advance was limited to thousands, usually less than Rs. 10,000. The rate of commission charged on sale was less than 5 percent. The commission agents are keen in pooling as much funds as possible from the institutional sources for enlargement and upgrading of the assets of the unit. Some of them has offered their personal property as collateral security. To make the fishing units eligible for financial assistance from the organised financial houses and to reap the benefit of subsidies, they keep themselves out of the unit, evading their involvement and capital contributions. Commission agents are the promoters of most of the fishing units. They initially pool together the fishermen to form the group and undertake all the functions relating to the fulfillment of procedures and rules insisted by the bank or Matsyafed. They advance funds for remittance of margin money also. This, in turn, make the fishermen an owner member in the unit without advancing any money. 56 percent of the fishermen and 33.3 percent commission agents consider the advanced money as investment and a part of capital of the unit.

5.2.2.1.2. Other Occupations These tharakans are the pioneers of export of fish. Much before the entry of processing houses for export during 1960s, they used to send dry fish to Srilanka, Burma, Malaysia and the Arabian countries. They were having a very good connection with the importers of these countries and supplied cured fish according to their demands. Most of them were curing yard owners also. When Indian prawns became an important item in the export market, they started supply of semi-cooked and dried prawns. But in no time the field gained momentum and a new class of exporters entered the field of fish processing and export, organised on capitalist lines. Introduction of ice for preservation, pealing, processing, canning, freezing etc., which required huge amount of capital and technology, reduced the field of these agents and today they are sheer commission agents and financiers of crafts.

5.2.2.1.3. Role as Financiers In traditional fisheries sector, the financial assistance offered by the commission agents are highly useful for the continued fishing operations by the unit. Their support is totally subjective and purpose oriented. It ranges from the money necessary for paying the barber for shaving before taking a photograph to be pasted on the application for loan from bank to purchase or construction of a new craft or procurement of a new OBE. They pay for margin money, assembling of gear, oiling a new craft, servicing OBEs, and also for working expenses like payment of bills for fuel, transport and bata to crew. Most of the fishermen, either collectively as the fishing unit or in individual capacities are used to take temporary advances for personal or domestic purposes. During off-seasons, payment of small amounts demanded by the fishermen for subsistence has become the duty of the commission agent. Further, with the boom in production and the rise in demand and price of fish, number of crafts engaged in fishing went up many folds. The number of tharakans also increased leading to competition among them. With the increase in their number, craft owners demanded more money as advance and in the fear of losing the dealership they paid accordingly. These funds were used by the craft owners to enlarge the craft and for procurement of modern gear like purse scine etc. By the middle of 70's the amount of advance went up to about Rs. 25,000 and the turnover of fish by the crafts were sufficient enough to promise a fair return on such investment. By the end of 70's, fish landings began to decline rendering many units uneconomical. Due to over exploitation by mechanised crafts, the traditional sector became sluggish. But alternatively the cost of craft and gear increased. Its owners abandoned many crafts, causing redundancy and capital loss to the commission agents. From the field studies it is learned that the loss of tharakans during this period ranged from several thousands to lakhs. Over and above, in 1982, the export of dried fish met with a severe depression, which they term as "Kozhuva Durandam" (disaster in white baits sale). Interviews conducted with the aged commission agents reveals that there are at least 100 tharakans in this district, who were made bankrupts by this depression.

5.2.2.1.4. Innovative Role It is interesting to recognize that, these tharakans are pioneers of most of the advancements in this sector. When the commercial banks and Co-operative Land Mortgage Banks started financing this sector under development schemes, they persuaded the fishing folk to organise groups so as to borrow money. Some even helped the groups by offering their own land as collateral security. When the modern sector introduced synthetic webbings, these people impressed the craft owners to adapt it; and finally they are the ice-breaking promoters of Out-Board Engines also. During the early days of motorisation, these tharakans adopted, persuaded, financed and popularised the engines as the efficiency of the motorised crafts were much more than the non-motorised. Later, enlarging of gear and the adoption of ring-scine was propagated by them with necessary pecuniary aid. The opinion of enlarging the craft, doubling the power of engine and what else, every demand of the fishermen was accepted and assisted by them. As a result, today, the average investment of a Tharakan on Thangu vala unit is Rs. 2,67,000/-, a Disco unit is Rs. 96,000/-, Gill-net is Rs. 29,000/- and for Mini-Trawler is Rs. 22,000/-.

TABLE 5.8. ECONOMICS OF COMMISSION AGENCY IN ALAPPUZHA.

Particulars	Thangu Vala	Chooda Vala	Gill Net	Mini Trawler
Investment (Rs.)	2,67,000	96,000	29,000	22,000
No. of days/ annum	176	121	146	195
Average catch/ day	12,600	5,650	2,400	1,240
Commission Rate	5%	5%	5%	5%
Income per day (Rs.)	630	282.50	120	62
Annual Income (Rs.)	1,10,880	34,182.50	17,520	12,090
Rate of return	41.53%	35.61%	60.41%	54.95%
Pay back period(Years)	2.41	2.81	1.68	1.82

Source: Primary Data (Based on mean Investment and results of model units- @ 1998 prices)

5.2.2.1.5. Range of Financing In Alappuzha district, there are 11 commission agents having dealership of more than 50 crafts. A sample commission agent have 26 Thangu vallams, 49 Chooda vallams, 17 gill netters and 149 Mini-Trawlers and a capital investment of about Rs. 4,11,38,000. He is the leading exporter of dried fish from Alappuzha. He is a Kerosene dealer and has two ice plants, a processing factory, and a fleet of carriers for transporting of fish. Further it is understood that he undertakes bulk purchase of OBEs to be issued to the fishing groups. In an interview with him, he claimed that he is the one to introduce OBEs in this sector. Different from other tharakans, this person gives crafts, gear and engine to his groups without any security or evidence. His rate of commission is 10% on sales and appropriations are made from the sale price daily, towards the price of equipment supplied by him. According to his practice, loan amount is recovered from the fishermen in less than a period of three years. As and when the dues are over he allows them, or even persuades them to buy a new craft, gear or a new engine. In the survey, it is observed that 40% of his customers have both Thangu vala and Chooda vala, to be used from a single craft alternatively, to suit the season and the type of fish available. Different from other commission agents, this man entrusts the engine to a particular person in the group, who is responsible for its possession and maintenance. He claims that his success is the result of his close contact with the groups, pampering them with money and means. A Pass Book is issued to each group, which contains all accounts of the groups. In the case of small crafts his practice is to appropriate the normal ownership share from each day's catch towards the debt. As a result the group get the absolute ownership of the craft within a short period of time.

5.2.2.1.6. Challenges from authorities Despite their creative involvement in the sector, many officials, researchers, social and political activists have been highlighting the evil side of the practise of Tharakans. They describe their involvement to be similar to that of the usurping Zamindars of North India. Hence, there have been frequent arguments demanding for Government measures to releave the fishermen off the influence of Commission Agents. Recently, as directed by the Matsyafed, the Village FDWCS started appointing commission agents of their own. According to the rules of MATSYAFED, all crafts attached to the Federation by availing loans are to sell their produce through the official agent only. Similar to other agents, the official Tharakan will also charge a commission of 5% on sale, to be remitted to the society. The society after deducting for repayment of instalments due to the Federation credits the group's account the amount of sale. From the commission of 5% charged the Tharakan will be paid 50%, and the rest forms income of the society. From the field study it is understood that these tharakans are to pay an amount ranging from Rs. 10,000/- to Rs. 25,000/- as security deposit to the society. It is also revealed that they are forced to pay an extra amount to the fishing groups also, which ranges from Rs 15,000/- to Rs 60,000/-. According to the rules of Matsyafed, the maximum number of crafts that an agent can deal with is two. In fact, these agents have also assumed the common trait and those who were unable to cater the demands of the fishing units were evicted from the post.

5.2.2.1.7. Social relationship While constituting the 'Kerala Matsya Thozhilali Kshema Nidi' (Fishermen's Welfare Fund) in 1988, the government considered the commission agents as employers of the fishermen and were accordingly required to remit employers share to the Welfare Fund. The reaction was very strong and multi-faced. In no time they formed a state level association by name 'The Kerala State Matsya Vitharana Thozhilali Union' and filed a writ-petition before the Honourable High Court of Kerala and succeeded in establishing that they are no employers and hence, are not liable to remit anything to the fund. Subsequently, their efforts were to establish that they are also active fishermen and are eligible for the benefits of the Welfare Fund. But, in this direction their efforts proved in vain. As a part of their efforts in this direction, the name of the registered union was changed to 'Kerala State Matsya Bhandana Vipana Thozhilali Union' Today the union is having a membership of more than 1,000 persons including Commission Agents, Wholesalers, Brokers, Small Scale Traders and Retailers.

5.2.2.2. Share Subscribers The second common form of private financing of traditional fishermen is the Share subscription. Under this system, the fishing group takes money from persons on condition that the contributor will be eligible for a share of income similar to the equity shares of companies. Such share subscriber is eligible for returns in multiples as the number of shares subscribed by him. The working members can also subscribe additional capital in this way and enhance their claim in the divisible income of the group out of each day's catch.

TABLE 5.9 ILLUSTRATION OF COMPUTATION OF DIVIDEND ON SHARES

(Model Thangu vala group)

Gross value of catch (Rs.)		26,000
Less Expenses		
Selling Commission @ 5%	1,300	
Landing charges	1,800	
Fuel	4,800	
Bata to crew Rs. 100 x 26	2,600	
Conveyance	1,800	
Refreshments	240	
Charity	260	
Total		12,800
Divisible Income of the day		13,200

Apportionment of Income @ 40:60 = 5280:7920

Portion divisible among workers i.e. 60% = 7920

Share of a worker = 7920/26 = 304.61

Income of a worker = Bata + Share = 100.00 + 304.61 = 404.61

Dividend on a Share = 5280/ 20 =264.00

(Assuming that there are 15 owner workers and 5 share subscribers)

Residual amount to the group as net profit = 5280 - 1320 = 3960

It is from this amount that the group is to meet expenses of repairs and renewal, repayment of debts, future expansion etc. and for the payment of dividend to owner workers.

i.e. if the group is not to save anything or appropriate towards contingencies, an owner workers income for the day shall be = Income as a worker + dividend

= 404.61 + 264.00 = 668.61

TABLE 5.10 ECONOMICS OF SHARE SUBSCRIPTION

Particulars	Thangu Vala	Chooda Vala	Gill Net	Mini Trawler
Value of Share (Rs)	50,000	15,000	10,000	10,000
No. of days per annum	176	121	146	195
Average catch per day	12,600	5,650	2,400	1,240
Common Expenses/ day	8,550	4,350	1,050	800
Divisible Income/ day	4,050	1,300	950	440
Ratio of Division	60:40	60:40	50:50	50:50
Divisible dividend (Rs)	1,620	520	475	300
Number of shares	20	10	5	3
Dividend per Share (Rs)	81.00	52.00	95.00	73.33
Annual Income81 x 176	14,256	6,292	13,870	14,300
Rate of Return	28.51%	41.95%	138%	143%
Pay Back period	3.51	2.38	0.72	0.7

Source: Primary Data

It is understood that in some areas the contribution of Rs. 5,000/- is enough for claiming a share, while in certain other areas the amount is Rs.50,000. The field study made in this respect reveals that there are persons who have subscribed money for more than 25 shares in different crafts. There are also crafts with such debts from more than 15 share subscribers. A share in income is calculated after appropriating the common expenses for fishing like conveyance, bata for the crew, expenses of food and drinks consumed during the course of fishing, expenses of fuel, unloading charges, commission payable to the Tharakan etc. The balance amount i.e. the net income of the day, is divided in the ratio of 60:40 being the labour share and proprietors share respectively. The labour share is then divided among the crew and non-crew labourers to determine the value of a share and this will be the amount due to a share subscribed. The dividend is payable out of the proprietor's portion and it will not affect the income of the workers. This naturally takes away the capacity of the group to pay back debts. From the field study, it is understood that 95% of such debts were contracted by the fishing groups because of urgent want of funds for expenses like servicing of engine. The net income for a shareholder is thus equal to that of a non-owner labourer. If we are to compute the earnings of owners after allowing 10 shares for money borrowed, the daily amount available for payment of debts meeting expenses of repairs and renewals, providing for depreciation etc. is negative i.e. the venture is on a loss.

5.2.2.3. Indigenous bankers and moneylenders Different from other sectors of the financial system, the traditional fisheries sector was rather free from the influence of moneylenders and indigenous bankers. Recently, this faction of financiers are also gaining a substantive position. During the course of this survey, a number of cases were observed, where there are borrowings from such sources on the basis of interest. The samples collected in this respect reveal that most the borrowings from the so-called 'Blade companies' are not genuinely connected with fishing. Earlier, when commercial banks were the primary sources of credit, some groups sought the assistance of moneylenders for remitting the margin money with the banks. Most of them repaid the amount within very short period also. Today, borrowings from these sources are becoming popular. In most of the incidence of borrowings, the debt was contracted by the groups to exclude either commission agents or share subscribers. As a fact the class was afraid of contracting debts for interest also. Obviously, the levy of interest is too simple to understand than the rate of return on investment of commission agents or share subscribers. Further the obligation to pay interest in regular intervals irrespective of the uncertainty of income may be the basic cause for their disregard to such sources. Therefore, fishermen prefer advances from Tharakan or share subscribers to 'blade debts' because these financiers knew the situation of the group better than any other creditor. However many of them are used to take advances from the local chit funds and pawners for their domestic purposes. The rate of interest ranges from 60 percent to 84 percent per annum for such borrowings and is repaid within a short period of time. The mean period of repayment is 402 days for debts for domestic purposes.

5.2.2.3.1. Lending Practices The style of lending by moneylenders is similar to those of the commercial sector. The amount of advance by moneylender is usually secured by the mortgage of title deeds of properties and a cheque which is either undated or blank. The borrower usually takes the amount after deducting the first instalment of interest. The interest is either paid in daily dues or weekly payments. The moneylender or his employee collects the amount of interest from the borrower through routine visit to landing centre or house of the group leader. The principal amount is also paid along with the interest instalment if the day's income from landing permits. Thus in the event of bumper catch the debt is closed there and then. Out of the 312 samples evaluated 121 groups are in the habit of seeking assistance from these sources. The instance of non payment of interest and debt is less than 7%. Here it is important to note the quality of adaptation of the moneylender to the specialities of this sector. They remain calm and keep restraint even if the group fail to remit instalments if the harvest continues to destitute. They patiently wait and observe the performance of the group until it gets a fair catch. The mean period of repayment by the borrowers is 6.5 months, which shows the rationality behind such debts.

5.2.2.4. Religion Based Institutions Existence of a set of religion based institutions is another peculiarity of the traditional fisheries sector, who offers financial aid to its members for both productive and domestic purposes. During the field study it is observed that there are a large number of borrowings in small amounts by the fishing folk from religious agencies. Some of them are 'Kara Yogams' of Dheevara Community, 'Karithas' of Latin Catholic Church, SNDP Yogams, Mutual Aid Societies of Islam Wakhaf etc. Earlier, the amount of loan was too small, generally less than a thousand rupees for which the rate of interest and the mode of repayment was also very simple. Most of them were borrowed on personal grounds and had very little connection with the procurement or maintenance of fishing equipment. However, nowadays there are instances of borrowings amounting to lakhs, spent for procuring fishing equipment. In those cases, the loan took the form of borrowing from moneylenders. The procedure as well as rules of payment of periodical interest coincides with that of money lenders. In fact today it is becoming difficult to make any distinction between the two. The mean period of repayment by the borrowers is found to be 10.2 months.

5.2.2.5. Friends and relatives Out of the 312 samples, 92 groups have borrowed funds from their friends or relatives working outside the sector. Most of such assistance accepts no interest. They are neither secured with any collateral. The fishermen repaid the sum on the event of fair catch and ample income. The mean period of repayment by the borrowers is found to be 4.32 months, which shows the logic of these debts.

TABLE 5.11. SOURCES OF FUNDS BORROWED BY TRADITIONAL FISHING UNITS (Out of 312 samples)

Source	No. of groups borrowed	Mean sum	Model purpose	Overdue
Institutional Sources				
MATSYAFED	219	5,46,200	Fixed capital	17.64%
Commercial Banks	32	2,17,600	Do	54%
PCARD Banks	11	1,15,360	Do	66%
Chit funds etc.	15	65,000	Do	2%
Private sources				
Commission agents	286	8,65,750	Do	98%
Share subscribers	68	68,000	Maintenance	81%
Money lenders	121	58,500	Working capital	7%
Religious Institutions	39	34,100	Do	15.38%
Friends & Relatives	92	1,17,700	All purposes	48.9%

Source: Primary Data.

The above table (Table 5.11) gives a solid idea as to the relative predominance of debt providers in the sector. Among institutional sources, MATSYAFED is the leader. On the other hand among private debt providers, the role of commission agent is explicit. Moneylenders, though popular, have only limited role in this segment as the average amount contributed by them is much lower than that of the Tharakan. Thus we proceed to make an attempt to analyse the role of Tharakan in detail.

Conclusion

In traditional fisheries sector, the development programmes implemented through the organised financial agencies has been useful in meeting the long term capital requirements. But, due to nonsuitability of terms and practices, most of the credit extended stand bad debts. The use of sofitcated engines and the uncertainity of harvest has necessitated more funds in the form of short term or medium term assistance, which the organised sector could not cater. The informal or indigenous financiers, particularly, the commission agents are providing such short term funds, which are highly useful for the continued fishing operations.

REFERENCES

1. R. P. B. Devies and K. Sakiantota, "Conference Summary; Prospects for the future of co-operative fisheries in developing Countries: in report of the First open world conference on Co-operative Fisheries", *International Co-operative Alliance*, London, 1975 p. 82-84.

2. R. P. B. Devies and K. Sakiantota p. 108

3. For comparative costs of hulls of wood, FRP. and Ferro concrete, see "Report of the National Commission on Agriculture, 1976" p. 131

CHAPTER 6

MARKETING OF FISH AND THE ROLE OF MARKET INTERMEDIARIES

This chapter contains a description of the prevailing fish marketing practices. An assessment on the involvement of different intermediaries in the sector is also made along with the analysis of price spread taking place in various markets.

6.1. Special Features of Fish Marketing In fisheries, prices at the landing phase are determined by the interface of the forces of demand and supply. The most important feature of the market of fish is the highly perishable nature of the products. The fishermen are usually constrained to dispose of their catch as quickly as possible after landing, due to the lack of proper storage facilities. This situation leads to heavy fluctuations in price, dependent on supply. Absence of large scale buyers and the involvement of market intermediaries adds to this situation. The fisherman has no way of influencing price formation by varying the supply of type or quantity of fish he offers on a given day. In fisheries, it is difficult to determine a fair market price also. Thus, in the short run his supply becomes completely inelastic in relation to prices. In addition, production is subject to relatively heavy and uncontrollable fluctuations caused by the changing biological and meteorological conditions on the fishing grounds. On the other hand, the demand for fish does not usually follow the fluctuations in supply. The demand for fish might either be inelastic or can undergo significant and unpredictable short run fluctuations. Further, fish production is seasonal. Fish and shellfish are landed every day within a season, excepting days with inclement weather, holidays and on festivals. The landed catch being perishable must be processed or disposed of quickly. The marketing process of fish is handled by a chain of intermediaries. In most cases, fish is sold on the landing centre through public auction. Unfortunately, wholesale merchants, exporters and the middlemen are more organised these days than the fishermen.

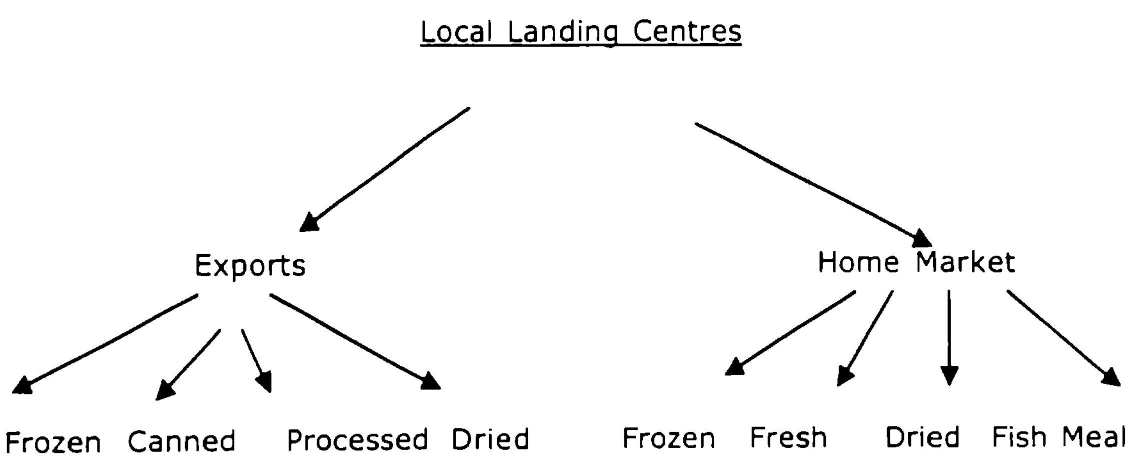
6.2. Pattern of Marketing The pattern of marketing fish in India has remained more or less unchallenged for the past many years. There is a long chain of intermediaries; functionaries operating between producer and ultimate consumer. While these functionaries help in the efficient distribution of fish, they also increase its price, and because of the many intermediaries, difference in price realised by the producer and that paid by the consumer is increasing. Considering the inherent specialities of fish marketing, the development approaches have changed towards the efforts for increasing fish production and trend has been to adopt large scale capital intensive storing and processing methods. These changes have occurred due to improvement in quality consciousness of the consumers, particularly of the foreign market and the changes in demand pattern. Huge production of many species necessitated scientific marketing. Different from the past indigenous market elements, today, most of the fish marketing is handled by wholesalers, brokers to the exporters and retailers of the nearby markets. However, the role of intermediaries continues to be the same; manipulating prices by correlating either production or demand, to corner the maximum benefit in exchange. The consumers' demand to fish is basically dependent on the judgement of quality, usually carried out by observation and inspection or the personal acquaintance with the retailer. Because of the fact that uncertain quality, products can seldom be standardised, this process is repeated by retailer towards wholesaler.

Following the introduction of modern technologies, today, the methods of processing, packaging and freezing of fish have improved very much. However, better quality frozen fish continues to remain unsuited with consumer's choice in home market because of price and tradition in consumption habits. This leads to larger demand for fresh fish in the market. The improvement in quality has continued to increase, with the catch being processed and frozen under excellent conditions, within hours after capture. The present fish marketing structure is scattered all over the world. Long distance marketing of fish products is practised mainly in international trade. A major proportion of the current trade of fish include relatively high priced frozen and canned products, meant for foreign markets.

6.3. Government Intervention In view of the need for orderly marketing, and with the aim of contributing to overall economic stability in the industry, it is necessary that the fisherman receive an adequate return for his catch. The governments and industry in developed countries have taken several operational support measures in this direction. These measures include either aid to support fishermen's income or support to keep landing prices at a reasonable level, or both. The operational support measures to stabilise fishermen's incomes are mainly in the form of direct grants and are designed to secure a normal income for fishermen, or fishing units faced with difficulties owing to seasonal fluctuations or structural changes in certain fishery sectors. The operational support measures, designed to keep the prices of landed catches at a reasonable level, work either by streamlining excessive fluctuations, or by subsidising support prices to provide fishing units with a reasonable return. In some countries, where no price subsidy is given, the government helps by fixing the prices or by making the industry pay compulsory levies to be distributed as and when prices fall below a previously fixed minimum. In India, the operational support measures have been merely confined to the improvement of marketing facilities and the introduction of specific systems aimed at ensuring orderly marketing. There are some incentives for exports, e.g., cash compensatory support. But the fishermen, by and large, suffer from the market fluctuations of prices and fluctuations of income because of fluctuations in catches. Besides the fluctuations in the income of the fishermen, the rising prices of raw materials and the narrowing down of the margin between the cost of production and unit-value returns are posing serious problems to the stability

6.4. Marketing Channels of Marine Fish Fish marketing has mainly two segments, collection and processing of fish and dispersion which are connected with channels of distribution. Fish supply is very uncertain due to dependency on natural elements. In this context, to fulfil the demand of fish, marketing channels have a vital and important role. In fisheries there are wide variations and differences in channels of distribution from region to region, town to town or place to place. In India, generally there are two types of fish markets, viz. fresh fish market and dry fish market. Main marine fish marketing channels includes, exporting in frozen or canned form, exporting in dried form, marketing of fresh fish in domestic markets, marketing of dried fish in domestic market, marketing of fish meal etc.

CHART 6.1. MARINE FISH MARKETING



6.5. Approach of Market Intermediaries In the marketing of fish there are large number of intermediaries between the fishermen and the consumers.

This has resulted in adverse price spread leading to lower share to fishermen and higher price burden for ultimate consumers. This is similar to agriculture. The fishermen get only about 10 to 15 per cent of the consumer rupee due to this long channel of intermediaries. Intermediaries are taking an important role in marketing channel according to prevailing system and marketing environment. Merchants an d middlemen, however, point out to fishermen that the fish in the sea are 'free goods', which the fishermen harvest daily for very little initial investment and negligible recurring costs. The merchants and middlemen claim that it is because they finance the investment and arrange for the distribution and sale of the fish that this 'free goods' acquire value. For as long as fishing was undertaken without using any form of mechanical propulsion, and despite the high level of 'cooperative conflict' in their relationship with merchants and middlemen, fishermen are prone largely to accept this argument. Even after the introduction of modern technologies, and the greater influence of capitalistic relations of production on many fishing units, one distinguishing feature of fishing has been the continued absence of a system of wage payments and the dominance of the income sharing system between fishermen crew and craft owners. This has continued to mask the contradictions in the production relations.

6.6. Status of Production Activity The status of fishing activity widely varies from place to place. It is very difficult to bring a common analysis. The production activity in the fishing industry may be termed in three different expressions as

1. Harvesting as an agricultural analogy,
2. Extracting in an industrial sense, and
3. Exploitation in biological or environmental meaning.

Harvesting is the ideal analogy that can be applied to the Indian fishing industry, since the technology and organisation of the industry is backward[1]

Over time, the production techniques in the fishing industry have become more efficient and assured. Even then, our fishing industry has not reached a stage of extraction; where the fullest possible techniques and equipments are used to reap the maximum richness of marine resources. Though there are arguments alleging over exploitation of marine resources at various fishing grounds of India, as long as there are areas which are yet to be explored, it will be unscientific to use the term exploitation to our fishing activities.

6.7. The Performance of Auction at Landing Centre. (First Sale)

The usual fishing occasion for the traditional crafts of larger classes starts in the early morning at about 4.30 am. on a working day. The crafts of larger size like Thangu vala are generally anchored at the chaakara areas and the smaller crafts will respite on the seashore. The crewmen arrive at the spot by different means of conveyance and if the landing centre is away, they may arrange for transportation by mini-lorries or Tempo vans. There may be extra men in a team than actually needed as crew, who after helping for launching of the craft will linger on the shore waiting for the craft to return. Ordinarily the crafts other than fibre boats or hook and gill-netters return within 4 to 6 hours. Nowadays, carrier crafts of Thangu vala units may start its shuttle trips between the craft and centre immediately after the casting craft has trapped the shoal in their purse-seine.

6.7.1. Assembling for Auction On reaching the landing centre, they are supplied with collection baskets, which are filled up either by the crew themselves or by those who were left on the shore by the team. A squad of head-load workers takes the filled baskets to the yard of the landing centre, where the fish are sorted, if necessary. For sorting and grading separate women workers may be engaged or the members of the team themselves do it. The catch, ready for auction is placed in baskets or may be heaped in the yard.

6.7.2. Process of Auction The 'Tharakan' or commission agent will perform the auction standing by the side of the harvest. Various Brokers, wholesalers and small-scale traders will take part in the bidding, if they are interested in the species and the size of the fish. The auction is open and there are no preconditions as to participation or the minimum or maximum price that can be quoted. The Tharakan shouts the bid price offered by each bidder and the deal will be fixed to the highest bid, which will be recorded by him in his pocket-diary. Usually the price quoted is for a basket-full of fish or the heap in full and not for weight except for prawns and export varieties.

6.7.3. Preparing for Market The fish is then taken to the loading spots where it is iced and packed in containers specially designed for carriage and storing. The brokers or the traders are to pay for the head-load, icing, packing and loading the produce on the trucks or insulated vehicles. Traders of small scale who use to take the produce to the local markets may not engage the head-load workers, instead they themselves will do, the tasks.

6.7.4. Effecting the exchange As a rule, the brokers or the traders do not make any payment then and there. The Tharakan will allow them a period of time for effecting payment. This credit is typical trade credit that carries no interest. In the case of brokers acting for exporters the average period is found to be one week, those acting for wholesalers is 1 to 4 days and small scale traders is 1 to 2 days. At the same time the Tharakan will pay the fishing unit the price of the produce in full or in part after deducting his commission at the agreed rate. If the crew is to make further voyage on the day itself, they may take payment later only. In the subsequent voyages the members of the team may arrange turns or shifts for the members of the team who were on the shore earlier.

6.8.1. Factors influencing price of fish landed The level and behaviour of fish prices on the landing centres are influenced by many factors. Some of the basic factors are: 1. Species and variety, 2. Size and grade, 3. Destination market, 4. Quantity of landed fish, 5. Supply for the day, 6. Total supply in the market, 7. Quantity landed of other species, 8. Seasonal changes in demand.

6.8.1.1. Species and variety The basic factor that determines the price of landed fish is its species. There are costly varieties and cheaper ones. Normally, fish that are export oriented have higher prices than those intended for local market. Species like Prawns, Pomfrets, Lobster, Seer fish, Rays, Cuttle fish etc. belong to costly species and varieties like Sardine, Mackerel, Anchovies, White baits etc. are cheaper. Further, there are different varieties within a species. For example in Prawns there are many varieties like kara, karikkadi, naran, poovalan, tiger etc. the price of which are widely different.

6.8.1.2. Size and grade Another important factor determining price of fish is its size. Normally larger fish will get better price. On analysis of the coefficient of correlation it is found that the prawns have the topmost price correlation to its size, which is worked out to be 0.92. The respective coefficient numbers are 0.90 for Pomfrets, Seer fish 0.82, and Mackerel 0.74. On the other hand, marginal correlation was observed for varieties like Rays -0.26, Sardine -0.36 and Shark -0.35 where the price per kg tend to dip along with the increase in size.

6.8.1.3. Destination market The nature of destination market also has an implication on price formation. Export oriented varieties enjoy maximum price. Fish which are suitable for processing, drying, storing etc. have better price than those which are highly perishable. However, this quality of certain smaller species like oil sardine, anchovies etc. will not run down below a limit, as there are alternative processing available for them. From oil sardine, rich sardine oil can be extracted, which would fetch a minimum price of not less than Rs. 300 per basket on current prices. From the survey it is understood that, from 40 Kgs of raw oil sardine of medium quality, 14 Kgs of oil (One Tin) can be extracted for an additional labour of around Rs. 50. The current wholesale price for one Tin of oil is Rs. 450. Therefore the minimum price of medium sized oil sardine at landing centre cannot sink below Rs. 350-400 per basket of 40 Kgs.

The economics of marketing dried anchovies is also similar. Dried anchovies/ white baits are preferred items in export market. The mean market price of one basket anchovies is almost equal to its corresponding price when cured. Study conducted on the price of cured fish at a local landing centre gives the following information.

1.8 Kg. of fresh fish is necessary to make 1 Kg. cured fish
Auction price of 1.8 Kg. of Anchovies / white-baits at landing centre = Rs. 15.75 per kg. @ Rs 350 per basket of fish weighing around 40 Kgs. (@Rs.8.75 per Kg.)
Wholesale price of 1 Kg. cured fish equal to 1.8 Kg. fresh fish. Rs. 28.50 per kg.
Margin available for curing process per kg. is Rs. 28.50 - 15.75 = Rs. 12.75 per kg.

As a result, the fishing unit in consultation with their commission agent may decide not to sell their produce in the landing centre and opt for processing, which would bring them a fair price. In most cases the Tharakan takes the commodity at his risk for processing.

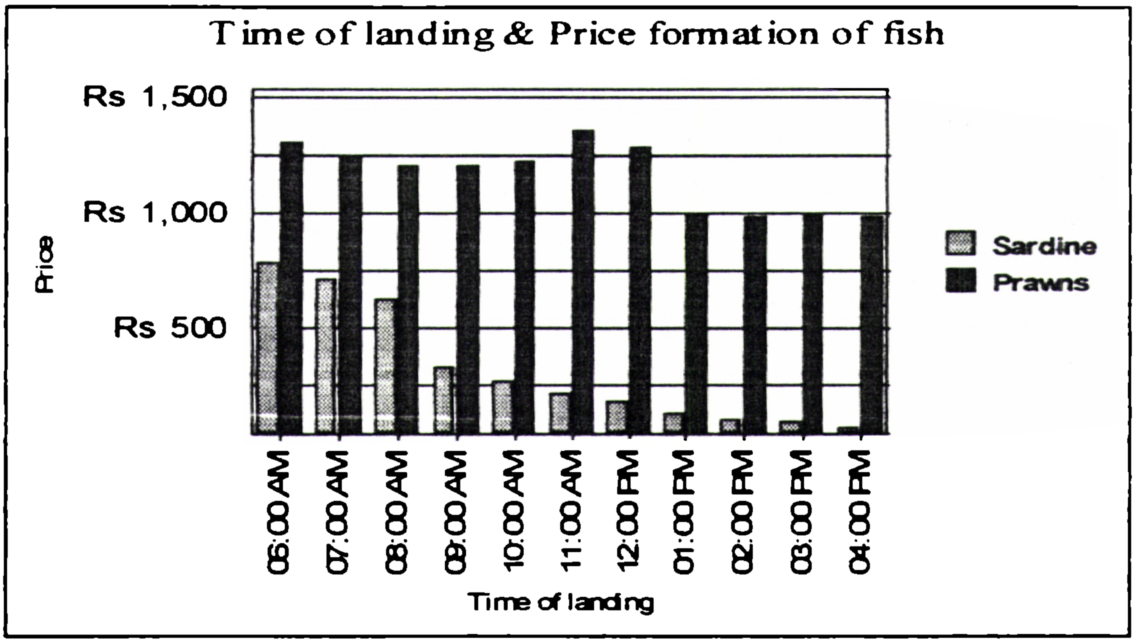
Other smaller varieties like lesser sardine, immature oil sardine, ribbon fish etc. if fails to fetch a minimum price will be dried on the beach itself, to be sold to fish meal manufacturers.

6.8.1.4. Quantity of landed fish Under the principle of elasticity of demand and price formation, the key factor is the supply. In fisheries, this principle has only partial application. Supply of fish in large quantities, always make demand inelastic, leading to quick drop in prices. Those crafts returning to shore with a small quantity of fish would normally get better price per unit than those landing larger quantities if it is a slack day. In the first instance the principle of pricing stood valid whereas in the case of bulk landing by a craft it would give an impression of more likely landings. However, this type of elasticity is imperfect for species demanded by exporters as they need fish in large quantities.

6.8.1.5. Supply for the day The general tendency of price on the shore is to sink craft by craft, depending on the quantity brought shore by each craft. Therefore the first reaching crafts will get better price than the late ones and the subsequent arrivals. Due to the lack of freezing and storing facilities, it is usual that the late arriving crafts get price as low as a twentieth of the first reached craft. The price formation behaviour of oil sardines and prawns landed in its sequence of time is plotted in the following diagram. The disparity is because of the availability of freezing and processing facilities available to shrimp, which is a favourite item of export.

6.8.1.6. Total supply in the market Nowadays, not only the supply available in the local market but the supply of all markets are also taken together for price formation at a landing centre. Almost all the market intermediaries and agents performing on the beach have mobile communication systems of their own and they make use of it to evaluate the market situation frequently. Thus, landing of identical species of fish at any landing centre within the geographical territories of wholesalers would influence the price formation in any given centre. Some type of a chain response can be observed in all these centres, irrespective of the condition of the local supply.

CHART 6.2. RELATION BETWEEN TIME OF LANDING AND PRICE



6.8.1.7. Quantity landed of other species This is yet another specialty of the fish market. Supply of a different variety and species of fish may affect the price formation of a given species, though it is short in supply and one would expect a fair price. This is because of the complementary and shifting preference in the nature of buyers demand. Generally, a buyer may go for alternative choice, when the price quoted for his preferred species goes high. If the supply is restricted to minimum species only and the prices are high, he will naturally choose his taste, leading to acceptance of the higher price. Thus larger supply of any one variety would cut down the theoretical price of another species.

6.8.1.8. Seasonal changes in demand and supply Like any other commodity, fish is also affected by seasonal fluctuations in demand. November - December months of every year are the most sluggish periods and the rest of the year is comparatively steady. This feature can be attributed to the holy season of Muslims and the pilgrim period of Hindus. Though every festival leads to booms in demand, the study conducted in this respect taking into consideration data pertaining to 10 years, no statistical evidences could be collected to prove the movement. This feature may be due to the influence of the shortage in supply during the respective seasons. However, an unjustifiable hike in price is experienced on all festive occasions.

6.8.2. Trends in prices of selected species of fish in Ambalappuzha / Purakkad Fish landing Centres An assessment of the trend in price variation of different common species would give a better understanding of the direction and behaviour of prices. Therefore an attempt is made to examine the Secular trend of fish prices in the main landing centres of Alappuzha district. The data of auction prices of different species were collected from the records of commission agents, fishing units and the published data of Directorate of Fisheries, Government of Kerala.

6.8.2.1. Secular Trend For assessing the secular trend of the prices of selected species of fish landed, the annual average price is taken for ten years period i.e. 1988-89 to 1997-98. The trend values are calculated for them using the method of least squares. The following equation was employed to compute the trend values

$$Y = a + bx$$

Where, 'a' is independent value and 'b' is dependent value. The value of 'a' and 'b' are found by the following equation

$$Sy = na + b \Sigma x$$

$$S xy = a \Sigma x + b \Sigma x^2$$

The trend values computed for the selected species of fish at Ambalappuzha landing centre are presented in the following table.

TABLE 6.1 - SECULAR TREND OF PRICES OF SELECTED SPECIES OF FISH AT AMBALAPPUZHA FISH LANDING CENTRE

(Price per basket of approximately 40 Kgs.)

Year	Prawns	Mackerel	Oil sardine	Anchovies etc.
1988-89	890.26	485.02	425.50	268.02
1989-90	955.82	494.14	442.90	274.84
1990-91	1021.38	503.26	460.30	281.66
1991-92	1086.94	512.38	477.70	288.48
1992-93	1152.50	521.50	495.10	295.30
1993-94	1218.06	530.62	512.50	302.12
1994-95	1283.62	539.74	529.90	308.94
1995-96	1345.18	548.96	547.30	315.76
1996-97	1414.74	557.98	564.70	322.58
1997-98	1480.30	567.10	582.10	329.40

Source: Primary data

During the period from 1988-89 to 1997-98, the beach-side price of Prawns at Ambalappuzha landing centre was rising by Rs. 65.56 per year. This feature can be attributed to the trend of growing exports that was taking place. Simultaneously, the quantity of landing also has been fluctuating but the trend of production as per CMFRI statistics shows a steady increase.

The price increase of Mackerel was marginal with an average of Rs. 9.12 only per basket. This slow pace of increase was due to bulk landings over the years. Though the production was irregular and huge, the price increased because of the prolonged short supply of the other species, particularly oil sardine. Due to reasons beyond explanation, oil sardines, the most regular and major species in fish landings, were totally absent during 1992-97 period.

The price rise index for oil sardine during the period was at the annual rate of Rs. 17.40. Though the species was not at all available regularly and in quantities, the price index never went up sharply. This feature may be because of the special nature of the fish market i.e. substitution. Further, there were no enough landings for commercial marketing also. This complementary effect is always visible in the case of species meant for local market. This may be the reason for the moderate rise in the prices of Anchovies which was computed to be Rs. 6.82 per annum.

6.8.3. Analysis of Relationship of Price with Quantity Landed

Under the price theory, the price formation is the result of the inverse relationship of supply and demand. Therefore, the more the supply and the demand being constant price should come down. On the other hand in the case of more demand and the supply being constant price should escalate. This relationship is applied for the verification of beach-side price formation of fish by using the Karl Pearson's Coefficient of Correlation. The formula for computing Pearsonian 'r' is:

$$r = \frac{\text{Co-variance of xy}}{\delta x \, \delta y}$$

Where co-variance [xy] = $\frac{\sum xy}{n} \quad xy$

$$\delta x = \sqrt{\frac{\sum x^2}{n} - (x^2)}$$

$$\delta y = \sqrt{\frac{\sum y^2}{n} - (y^2)}$$

TABLE 6.2 – KARL PEARSON'S COEFFICIENT OF CORRELATION BETWEEN BEACH-SIDE PRICE AND QUANTITY LANDED BY TRADITIONAL CRAFTS

(Price per basket of approximately 40 Kgs.)

Year	Prawns	Mackerel	Oil sardine	Anchovies etc.
1993-94	- 0.13	0.58	0.47	0.68
1994-95	- 0.12	- 0.74	0.24	0.77
1995-96	0.09	- 0.66	0.35	0.72
1996-97	0.16	0.72	0.54	0.67
1997-98	0.35	0.55	0.62	0.66

Source: Primary data

From the above analysis, it could be understood that there is no significant correlation between price variation and quantity landed in the case of prawns, which is an export item. In all other cases, the general trend of the price is to go down with the increase in quantity. Therefore, in fisheries, supply plays a key role in the formation of price.

6.9. Malpractices in the Primary Market The middlemen present in the first sale of fish on the landing centre collectively do a number of malpractices there. Even though the auction seems to be competitive and free, it is learned that there is a conspiracy between the brokers and small-scale traders regarding the price at which the bidding is to be clipped. This factor is marked on days of reduced catches when the price is likely to rise. Similarly, the prices of export species like prawns will never go beyond a limit, irrespective of the supply. Thus it is true that the middlemen essentially obstruct the formation of better prices for catch through their hidden agenda. The trick of putting this ceiling is termed as 'Kick' (Chavittu). In practice the maximum quotation is blocked by the brokers by means of certain code words, sound modulations while quoting, actions of fingers or face etc. There are a number of instances of clashes leading to hustle between the brokers and fishermen pertaining to this malpractice. Even though there are complaints, the fishermen are satisfied with the mode of auction in the first sale.

TABLE 6.3 OPINION OF FISHERMEN ON THE PRACTICE OF BEACH SIDE FIRST SALE PROCEDURES

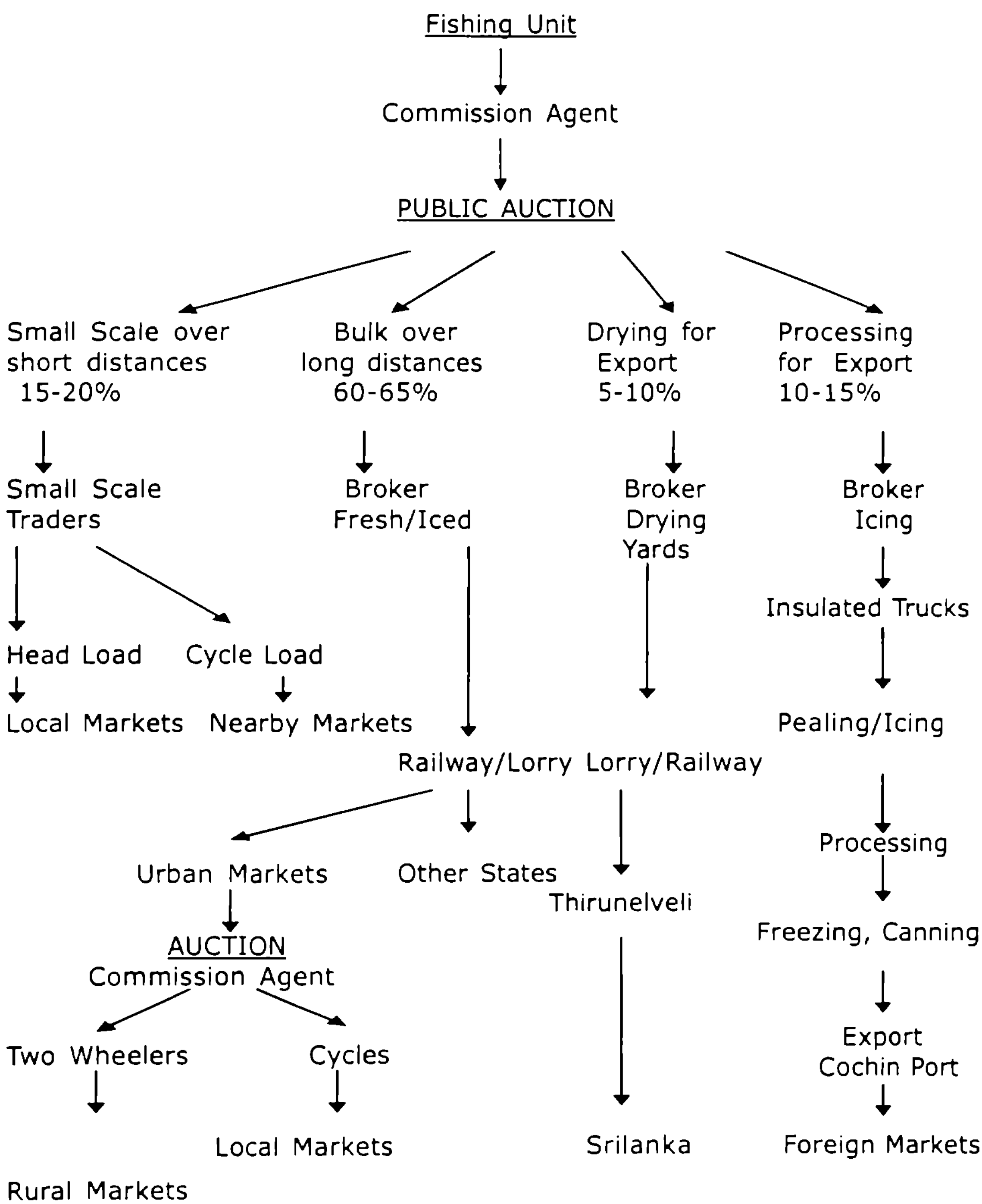
Centre	Satisfied	thinks fair	thinks unfair	deplorable
Thrikkunnapuzha	37%	45%	15%	3%
Purakkad	46%	26%	18%	10%
Vadackal	52%	30%	14%	4%
Kanjiramchira	49%	22%	8%	21%
Omanappuzha	39%	25%	15%	11%
Pallithodu	39%	19%	19%	23%

Source: Primary Data

Another malpractice prevalent in the first sale is the insisting for further reduction on the quoted price by the wholesaler or the broker after finalisation of the bid. This is termed as 'Kunju' or 'Kunju cash'. Brokers facade this to be some sort of cash discount due to them irrespective of whether they pay cash on the spot or not. It forms an additional income for the brokers or wholesalers over and above their normal returns.

CHART 6.3. MARKETING CHANNELS OF FISH

FISH LANDING CENTRE



This usually takes place as the result of a conspiracy between the tharakan and the broker. As long as the responsibility of sale rests with the tharakan, and he is to pay cash to the fishermen as and when they demand, allowing credit to brokers or wholesalers is his headache and no logic is, there to ratify the allowance of ' Kunju' on the quoted price to be endorsed by the fishermen.

6.10. Price Formation in the Secondary Market As shown in chart 6.1, the catch from Marine fish landing centres are dispersed through four channels, viz. Small scale over short distances, bulk over long distances, drying for exports and processing for exports.

9.10.1. Small Scale Over Short Distances The small scale traders include male and female head load vendors, taking the produce from house to house or to the local rural markets, cyclists taking the produce to local as well as urban markets or households and the two-wheelers, rushing the catch to the urban markets. All these sorts of traders take only a basket full or container full of fish, the cost of which may be less than Rs. 1,000/-. The usual system of effecting payment by them is that the price of the produce taken on the day is paid on the subsequent day. Small traders of the above category are found in the secondary markets also where they buy fish in small quantities from the wholesaler or his agent.

6.10.1.1. Price Spread Analysis The study conducted on the price of one basket of sardine weighing about 40 45 Kgs. sold out at the local households by a cyclist in Alappuzha town reveals the following information.

Auction price at local Landing Centre = Rs. 450/- per Basket (45 kg.) i.e. Rs. 10.00 per kg.

Retail price by the cyclist at Alappuzha household = Rs. 20/- per kg. i.e. Rs. 900 per basket.

Margin for the cyclist: Rs. 900 - 450 = Rs. 200/- -per 45 kg. i.e. 100% on cost.

6.10.2. Bulk Over Long Distances The wholesalers taking the bulk of the produce over long distances obtain the commodity from the tharakan through his broker, for which payment is made on the next day only. The broker acts as the guarantor for the value. The usual practice of the wholesalers is to rush the produce to the best possible market, were according to his judgment, he could get the best price, provided he reaches first. Similar to the competition of crafts to reach the landing centre first, there is a contest between the wholesalers as to reach the wholesale markets at the earliest.

In the wholesale market, the produce is auctioned in public. There also, the auction is convened by a tharakan and the bidders include small-scale traders, brokers etc. It is understood that this commission agent is also a financier for the lorry-owners and the small-scale traders. Generally the payment for the fish brought to the wholesale market is paid on the spot by the tharakan who recovers the price from the small-scale traders on the subsequent day. The destinations of the wholesalers are very wide and include urban markets of the neighbouring states also. Each such market is having a particular business time and it differs from market to market. As such, the destinations are usually fixed taking into consideration the starting time, distance, destination of other competing vehicles, quantity of fish reaching the market from other districts etc. The vehicle reaching one market need not sell its cargo there itself. If the price quoted is below the expected level, it may proceed to another market where they could expect a better price.

The advent of mobile communication equipments, have made their adventurous competition more definite and effective today.

6.10.2.1. Price Spread Analysis A sample taken from Changanachery Town market gives the following figures.

Auction price at Alappuzha landing centre = Rs.450/- per basket (45 Kg.) i.e. Rs.10.00 per kg.

Auction price at Changanachery wholesale market = Rs.700/- per basket (45 Kg.) = Rs.15.55 per kg.

Margin of the wholesaler = Rs 700 450 = Rs.250/- per 45 kg. i.e. 55.55% on cost.

Average conveyance expenses per Kg. = Re.1.00 per Kg.

Commission to Agent at Changanachery = Rs 0.77 per Kg. (5% on sales)

Market charges = Rs.0.23 per Kg. (Rs. 200 per truck)

Retail price by a cyclist at Changanachery. = Rs.28.00 per kg. = Rs.1260/ per 45 kg.

Margin for the cyclist = Rs.1260 700 = Rs.560/- per 45 kg. i.e. 80% on cost

6.10.3. Drying for Exports The curing yard owners or their brokers who buy the fish through bidding at the auction from the landing centre move the produce for drying and curing to the curing yards, usually situated very near to the landing centre. The study conducted on this side of fisheries marketing reveals that, most of the brokers and some of the tharakans are curing yard owners. Normally a period of 4 to 7 days is necessary for the fish to get cured. The cured fish after winnowing and grading are packed in baskets, trays or bags and are send to various destinations. The major part of the dried fish is sent to Thirunelveli, from where it is exported to Srilanka. The dried items are having very good market in the eastern districts as well as in the neighbouring states like Karnataka, Tamil Nadu, and Andhra Pradesh. The drying activities provide large employment opportunities for women folk in the district. Generally the price of the fish taken for curing is paid to the fishermen by the tharakan as usual but, the account between tharakan and the curing yard owner is settled periodically.

6.10.4. Processing for Exports The brokers acting for export processing units act according to the daily directions received by them from the exporters, usually by telephone or through messages send by lorry used for transporting the produce from the centre to the factories. The instructions include all the specifications of their demand, like the nature of fish needed, quantity, maximum price etc. From the studies it is understood that the period for effecting payment by the exporters is about a week. The rate of brokerage allowed to the brokers differs from species to species and on the difference between the quoted and the actual price of procurement, he gets an additional incentive. There are also brokers, who undertake the primary processing functions like pealing, dressing or washing of the fish taken for export before they are sent to the factories. The exporters supply them with the ice-slabs necessary for icing and the accessories needed for the processing. These activities also provide occupation for the women folk of the fishermen households extensively.

6.10.4.1. Price Spread Analysis A similar study on the prawns going for export reveals the following facts.

Roughly 1.667 Kg. Fresh prawns is required to supply 1 Kg. processed meat

Auction price of 1 kg. Prawn at landing centre = Rs. 38/- per Kg.

Price of 1.667 Kg. (to give 1 Kg. meat) = Rs. 63/- per Kg.

Export price of 1 Kg. processed meat = Rs. 204.61 (1998 prices)

Margin of exporter for 1 Kg. meat = Rs. 204.61- 63 = Rs. 141.61 per Kg.

The above analysis makes it clear that the price of all types of fish goes many folds higher before it reaches the ultimate consumer.

6.11. A Relative Appraisal of the Role of Commission Agents in Fish Marketing

In marketing of fish, the position of the commission agent is slightly different from that of the arhats of the North Indian agricultural markets or that of the export houses of the coir exports market.

6.11.1. Representative of the Producer In fisheries, the commission agent acts as the representative of the producers i.e. the fishermen; whereas the other agents act for the market. This may be due to the fact that in fisheries, supply is the market determinant, since, it is not possible to plan the production according to demand, as is possible in other sectors. As far as the other sectors are concerned, the success of the agents lies in procuring more orders at higher rates. This is possible only through stronger tie-ups with the buyers' representatives. Thus, they are to represent the interests of the buyers.

6.11.2. Production Oriented The fish market becomes alive only when the fishing groups fetch fish in ample quantities. The agricultural market and the exports market flourishes when there are ample buyers or are getting big orders. Therefore, the commission agent in fisheries is to concentrate on production, and stay with the fishing units to see that the production that is the harvesting becomes more and more efficient.

6.11.3. Innovative Trait Both these agents are innovative. In fisheries, commission agents are keen in developing more efficient technologies to enhance harvesting and in increasing capacity to take the benefits of more production. The innovative trait of the other agents is to promote the production of more attractive output to appeal the buyers.

6.11.4. Finances Both Producer and the Market Both these agents finance production process. In agriculture, the assistance is in the form of working capital, advance price, forward sales etc.; In coir industry, the exporters provide latest technologies, new and attractive designs, equipments, raw materials and working capital. Commission agents acting in fisheries sector provide funds for capital investment, maintenance, working capital and also for meeting contingencies and domestic needs of the fishermen. Different from the other agents, tharakans in fisheries market provide credit to the wholesalers, exporters and even the retailers also.

6.11.5. Prone to market imperfections Their position being that of mere market intermediaries, they have no control or role in price formation; the determining force is the target market. Different from the other middlemen, commission agents in fisheries have to face the challenges of persistent market imperfections due to the irregular nature of supply.

6.11.6. Lower Risk of Competition The exporters in coir industry and the arhats of agricultural market have to face competition in the market or mandi. Their success lies in supplying the goods in the most competitive price to the maximum destinations; whereas, the commission agent of fisheries market need not have to take up this challenge. However, he too is to keep regular contacts with the brokers, wholesalers and other middlemen to ensure a fair price to the landed fish.

6.12. Functions of commission agents

The functions of commission agents in traditional fisheries may be summarised as follows.

6.12.1. Act as market intermediary In fisheries, generally, the producers i.e. the fishermen never comes in to direct contact with the buyers i.e. the wholesalers or the exporters. However, there are cases of direct sales by the fishermen at different centres. This practice is popular only in the case of small units like Kattamarams, fibre boats, dappa, dingi or shore scine operators. In those cases, their very small quantities of assorted fish may be purchased by the small traders, small processing units or directly by consumers. In this district under study, most of such sales are being done by women head load traders, who may be the family members of the anglers. However, this practice is beyond the imagination of bigger units, which land fish in huge quantities. In this major area, the assembling of the market is the function of the commission agent.

6.12.2. Assemble market and decide the landing centre In traditional fisheries, it is the commission agent who is to decide as to where to land the catch of the fishing units. He will decide the station in consultation with the wholesalers, brokers and the fishermen. The commission agent will inform the brokers and wholesalers, the current position of landings and ask them to come over to the beach to participate in the auction. Actually he is the most learned statistician in the traditional fishing.

6.12.3. Act as advisor, navigator and guide to fishing units Out of sheer experience and the capacity of observation, most of the tharakans are capable of advising their fishing units as to whether go for fishing or not. He may also direct them to ply in a certain direction, where according to his judgement; ample fish shoal may be available. He is the force that instigates the fishermen to form fishing units, procure assistance of financial institutions, go for larger and efficient tackles and even in decisions relating to domestic issues like marriage, children's education, house construction etc. Nowadays, he advises the fishermen even on organisational and political issues also.

6.12.4. Providing finance Over and above contributing to the common stock of the fixed capital of the unit for procuring fishing equipments, commission agent also extends his helping hand at times of emergency. He finances for payment of oil bills, refreshment, conveyance, medical aid, daily bata etc. From the survey it is read that in 18% cases, he even advances for payment of loan installments. Over and above this trade related assistance, financial helps are also extended by them to enable the fishermen to survive off-season, household ceremonies, marriages, medical treatments, education and other emergencies. In short, he is the friend in need for the fishermen.

6.12.5. Act as mediator in settlement of disputes During the course of this survey, the law and rule situation of the coastal villages was also looked into. In the coastal villages of Alappuzha, where, the control of commission agent is above 90%, the number of instances of reported mass crime was 5.2 incidences per annum. Whereas, the average instances is 16 in Thiruvananthapuram district, 8.1 at Kollam, 7.7 at Ernakulam, 9.2 at Trissur, 12.8 at Kozhikode, 14 at Kannur and 9.5 at Kasargode. It is worth to study this situation, as in all those districts where the instances are less than 10, standing of commission agent is above 90% on fishing units. The instances of illicit liquor related crimes are also the lowest in these districts. (Source of Data: Police Department).

In the opinion of the respondents, the involvements of the commission agents are very vital in settling disputes. Here, it should be noted that the fish landing centres are the most vulnerable areas, where there are large number of disputes everyday. However, in the opinion of 6.4% respondents, the commission agents are the reasons behind all these conflicts!

CONCLUSION

From the above discussions, it is clear that in the marketing of fish a group of intermediaries are making undue gain. The involvement of private traders like wholesalers, retailers, exporters etc. with the assistance of brokers tells badly upon the trend of price at the landing centre. Both the fishermen and the commission agents are helpless in front of these buyers and their agents in procuring reasonable price. However, the commission agents cannot be considered a part of this group of usurers.

NOTES AND REFERENCES

1. The Soviet economist Chesnokov wrote: "Fishing greatly resembles agriculture and in the case of culturing in ponds merges with it; processing closely resembles industry notably the processing of agricultural products." Chesnokov, M.I., "The Subject of the Economics of Fishery Another Soviet fishery economist, Sysoev said: "There is a great difference between agriculture and fishing (an extractive industry). He concluded that fishing closely resembles extractive industries; like coal, oil, and ore industries." See Sysoev, N.P., Economics of Soviet Fishing Industry", Israel Programme for Scientific Translation, Jerusalem, pp. 1 -3, 1974.

CHAPTER 7

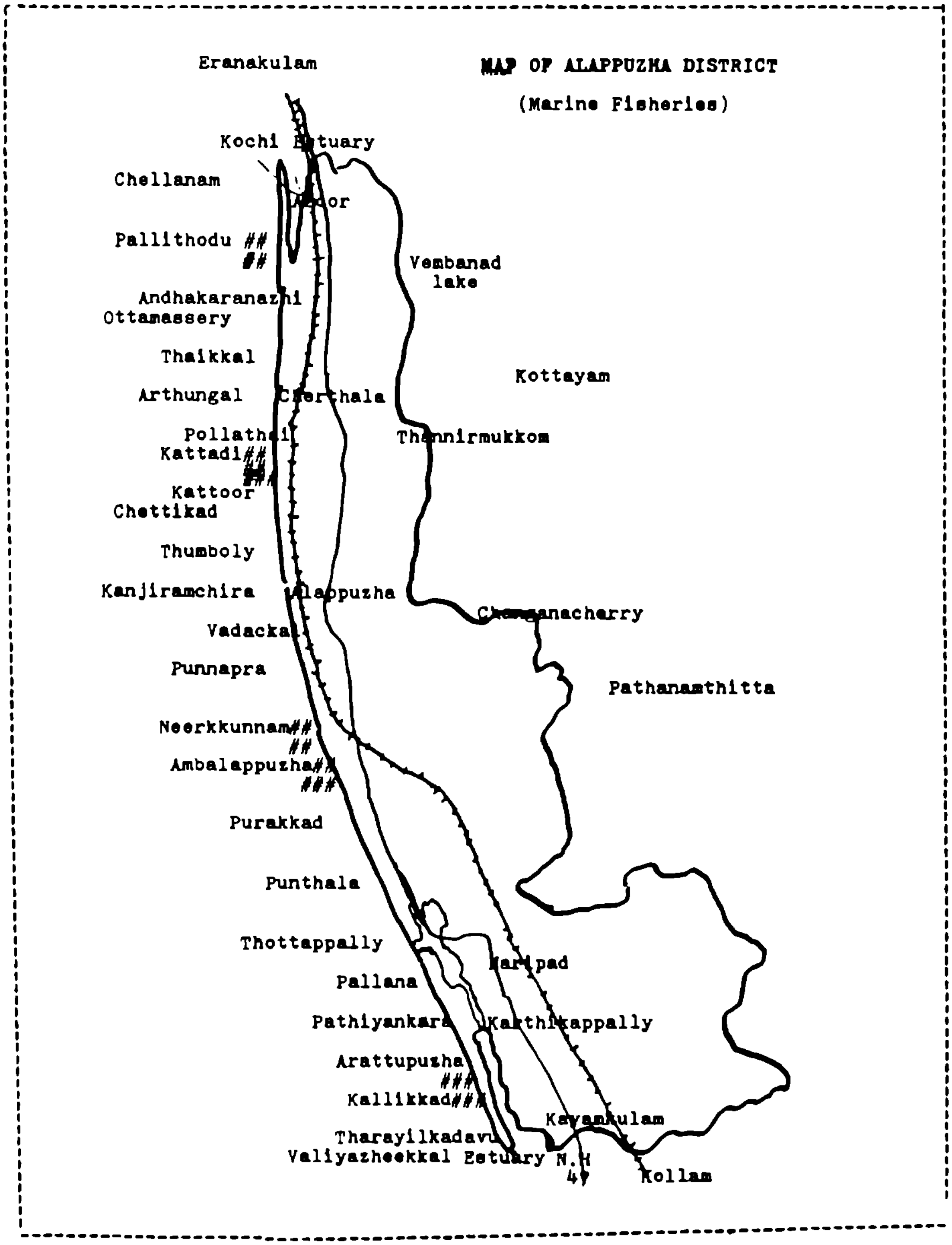
ANALYSIS OF THE FINANCIAL PERFORMANCE OF FISHING UNITS AND THE ROLE OF COMMISSION AGENTS AS FINANCIERS

This section of the study contains the results of the analysis of primary data and highlights the role of the commission agents in the life of traditional marine fishermen. In order to examine the extent of involvement and to bring out a proper delineation of the role of commission agents, the household economics of the fishermen are also analysed.

7.1. The Data Source This exploratory study is mainly based on primary data. The data was collected from Alappuzha district of Kerala state covering all the 30 marine fishing villages spread over three thaluks namely Karthikappally, Ambalappuzha and Cherthala.

Features of Coastline and Landing Centres of Alappuzha Alappuzha has a coastline of 81.7 Km., which accounts for 14% of the State. The continental shelf of Alappuzha is smooth and devoid of any rocky or coral formations and thus affords excellent bed for trawling operations. The tidal influence is moderately felt, the maximum height varying between 2.5 to 3.5 feet only. Valiyazheekkal, the estuary of Kayamkulam back waters forms the southern boundary of the district and there are two more openings at Thottappally and Andhakaranazhi. Although these 3 estuaries and some 18 fish landing centres are there, majority of landings are usually made on 4 centres where the sea remains calm, (termed "Chaakara") almost around the year. The Valiyazheekkal estuary is open as well as navigable for at least 10 months in a year and efforts are on for developing it into an all season fishing harbour for artisanal and mechanised crafts. Thottappally, which has all the advantages of convenience and economy, is navigable for country crafts for more than 6 months in a year. Andhakaranazhi is also awaiting expansion

MAP 7.1. MAP OF ALAPPUZHA DISTRICT SHOWING FISHING VILLAGES



in the form of an all season fishing harbour, where already landings are in progress for more than 7 months in a year. However these estuaries are not safely navigable because of shallowness and the heavy currents caused by tides and outflow of water during monsoon. Therefore, most of the country crafts prefer to make landings at the "Chaakaras" where the sea remains calm and mud-bound or at Neendakara or Kochi harbours. The major Chaakara landing centres are Arattupuzha, Ambalappuzha, Kattadi and Pallithodu.

On the basis of landing intensity, the landing centres of the district may be classified as follows:

1. High intensive fishing centres, having fish landings round the year by all classes of craft gear combinations.
2. Medium intensive centres, landing by certain class of craft only round the year and
3. Low intensive fishing centres, which are either seasonal or provide landing for very few crafts.

TABLE 7.1. MARINE FISH LANDING CENTRES OF ALAPPUZHA DISTRICT

High intensive	Medium intensive	Low intensive
1. Thrikkunnapuzha	1. Arattupuzha	1. Valiyazheekkal
2. Ambalappuzha	2. Punthala	2. Punnapra
3. Kattadi	3. Purakkad	3. Vadackal
4. Pallithodu	4. Neerkunnam	4. Alappuzha
	5. Kattoor	5. Thumboli
	6. Andhakaranazhi	6. Pollathai
	7 Arthinkal	7. Ottamassery

Source: Primary Data.

Small sized crafts like Mini-Trawlers, Fibre-Glass gill-netters, Dappa, Dingi, Line and Hook Boats, Drag-Netters etc. are used to make launchings and landings over the surf at convenient beaches, all along the coast. The coastline of Alappuzha is accessible by road throughout its length except for less than 5 Km., where the sea-wall road is partially damaged or broken by narrow inland water streams. As such, there are many pockets where landings are made.

The beaches near the Chaakara centres beyond the sea wall are usually wide, which are highly useful for drying of fish. Most of the curing process is done by conventional methods like open-solar drying, salting and smoking. Anchovies, sardine, Ribbon fish etc. are dried on the beaches either on the soil itself or on coir mats; whereas Mackerel, Shark and other larger varieties are salted and dried or smoked at special shacks. The dried fish are primarily sent to Thirunelveli, from where it is shipped to Srilanka and other destinations. The drying activities are useful in keeping the price of the fish high, even during bumper catch seasons.

TABLE 7.2. DISTRIBUTION OF PERSONS ENGAGED IN FISHERIES AND ALLIED ACTIVITIES (1991 Census)

Occupation	Marine	Inland	Total
Total Households	14,985	9,830	24,815
Fishermen Population	1,06,371	59,314	1,65,685
Active Fishermen	23,013	13,401	36,414
Loading, Sorting etc.	7, 860	2,450	10,310
Marketing	4,790	1,870	6,660
Processing	2,340	NA	2.340
Commission Agents	725	NA	725
Brokers, Pealing & Curing Yard owners	108	62	170
OBM. Servicing	69	Nil	69
Boat Building & Repairing	124	86	210
Others	2,000	1,300	3,300

Sources: Field Study estimates and 1991 Census report.

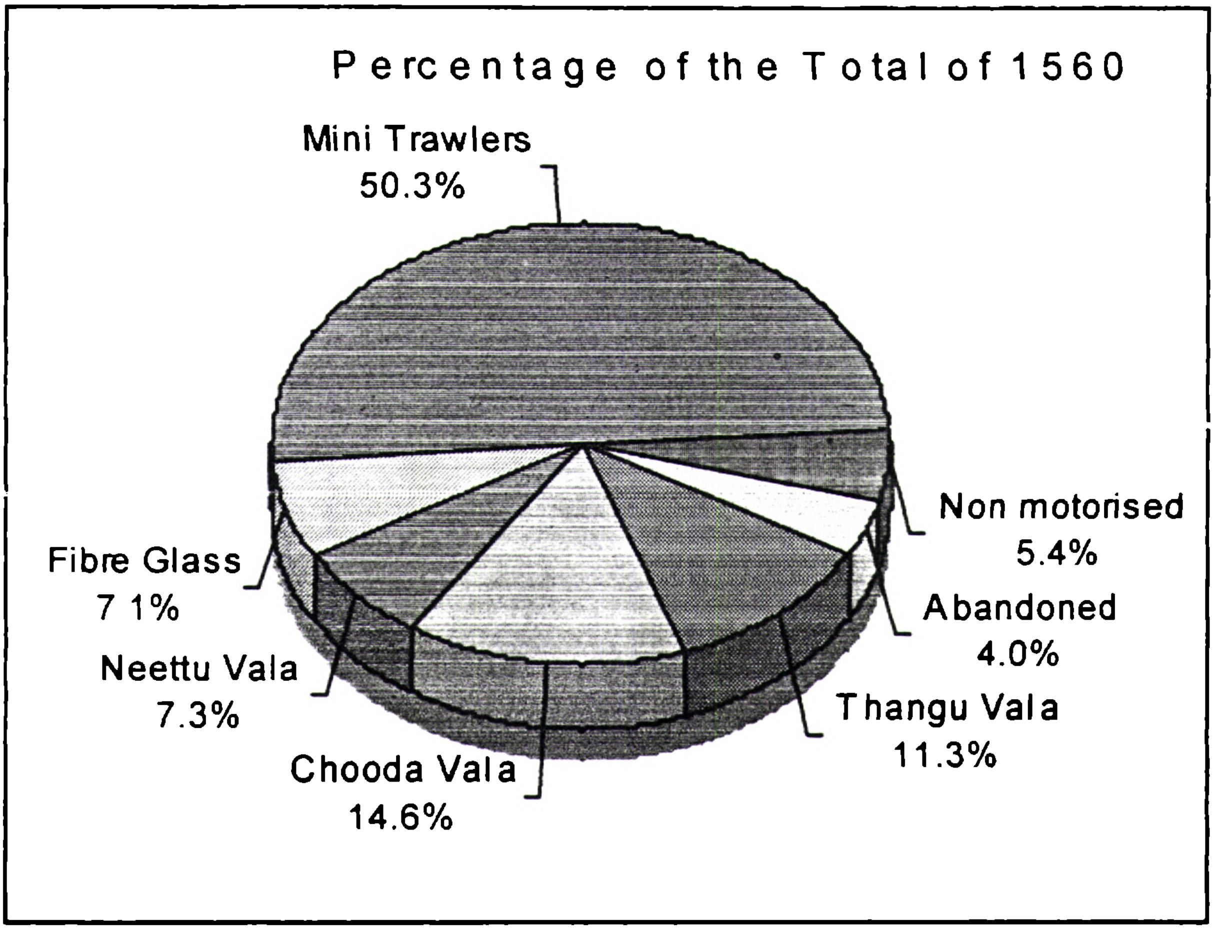
TABLE 7.3. DETAILS OF SAMPLING OF TRADITIONAL FISHING UNITS AND THE POPULARITY OF COMMISSION AGENCY

Type of craft gear combination	Estimated universe	Sample population	With commission agent
1. Thangu vala units, (Ring scine)	176	35	35 (100%)
2. Chooda vala units, (Disco net)	228	44	44 (100%)
3. Neettu vala units, (Drift net units)	114	22	22 (100%)
4. Fibre glass units, (Hooks and line)	110	21	21 (100%)
5. Mini trawlers	785	160	154 (96.2%)
6. Others (non motorised)	85	19	8 (42.1%)
7. Abandoned units (All types)	62	33	17 (51.5%)
Total	1560	312(20%)	301 (96.5%)

Source: Primary Data

7.2. Fishermen Statistics According to 1991 census, there are 30 marine fishing villages in the district, spread over three taluks. There were 14,985 marine fishermen households in the district with a total population of 106,371 of which 32,876 male, 32,150 female and 41,345 are children. The breadth of the fishermen villages is roughly half a kilometre. Thus, the density of population is 2317 persons per sq. Km. The average density of fishermen households is 327 per Sq. Km. The number of seagoing Marine fishermen amounted to 22,876 in 1991, which accounts for only 21.5% of the total Marine fishermen population of the district. It was estimated that about 17,000 persons are directly engaged in this sector. Table 7.2 shows the detailed position.

CHART 7.2. COMPOSITION OF TRADITIONAL FISHING UNITS



7.2.1. Sample Selection For the purpose of the study, it was decided to collect data from a sample of 20%, so as to represent all categories and varied population. Thus, the respondents were

Fishing units- 312, Commission Agents- 145, Wholesale merchants, retailers and brokers- 22, Processing exporters - 15, Fishermen Co-operatives (FDWCS) - 10.

Respondents from the first two sources were selected under multi-stage stratified random sampling method. The data were collected by verifying the records of the fishing units and through interviews conducted with the group leaders and commission agents, by means of schedules. From the other sources information were collected through structured questionnaire and discussions. To study the trend of pricing and to understand the marketing practices, the method of concurrent observation was adopted at landing and marketing centres selected on the basis of fishing intensity. From the selected primary centres, samples of fishing units were drawn to represent all classes of crafts. The sample fishing units and commission agents were supplied with diaries for recording the operating results. Accordingly, records for a four year period, i.e. from 1997 to 2000 were collected.

TABLE 7.4. INFRASTRUCTURAL AND ALLIED FACILITIES

Type of Facility	Alappuzha	Kerala
Fish Landing Centres	18	126
Fishing Harbours	Nil	10
Fish markets	4	58
Fishermen Welfare Co-operatives	38	291
OBM Servicing Centres (Matsyafed)	2	18
-Do- (Private)	67	N.A.
Authorised Kerosene Dealers	14	116
Mechanised Boat Builders	4	26
Traditional Boat Builders	13	97
Ice Plants, Freezing Plants etc.	82	408
Exporters of Marine Products	21	135
Export processors	60	N.A.
Wholesalers	110	N.A.
Commission agents	725	N.A.

Sources: *Kerala Fisheries, Facts and Figures* and Own Estimates.

7.3. High Intensive Fish Landing Centres of Alappuzha

In Alappuzha district there are many marine fish landing centres. Most of them are seasonal and only 4 centres are identified as all season and major centres. They are Pallithodu and Kattadi in Cherthala Taluk, Ambalappuzha or Purakkad in Ambalappuzha Taluk and Arattupuzha in Karhikappally Taluk.

1. Pallithodu It is estimated that about 100 crafts are making their landings regularly at Pallithodu, including all classes of crafts. The centre is situated by the side of Azheekkal Fort Kochi road about 4 Km. west of Thuravoor Junction on N.H. The road leading to Thuravoor facilitates approach for vehicles to the centre. There are about 50 ice-factories within a distance of 10 Km. from the centre, which supply necessary ice-slabs for icing the fish landed in this centre. The average turnover of the centre in quantity terms is estimated to be 150 tonnes per day. More than 75 commission agents, 20 brokers, 65 head-load workers and 75 other workers earn their livelihood from this centre.

2. Kattadi This is the most active landing centre of the district. Presence of Mud-banks during monsoon, consecutively for the past many years has made this centre all season and most convenient centre. Because of the continued chaakara the beach is wide and much spacious beyond the sea-wall. As a result Kattadi is a major fish curing centre also, where tonnes of Anchovies, White baits, Sardine etc. are dried on the beach and are routed to many central and North Indian markets and also to foreign countries. It is estimated that about 1,500 crafts are making their landings regularly and the average turnover is about 750 tonnes per day. There are about 125 commission agents, 160 brokers, 150 head-load workers and 300 other workers in the centre. The average number of vehicles visiting the centre per day is estimated to be 280. There are about 30 ice plants within 10 Km. of the centre and the Alappuzha Cherthala coastal road with its large number of link-roads with the N.H. 47 facilitates the transportation.

3. Ambalappuzha/Purakkad Situated very close to the N.H. 47, this centre has all the advantages of good infrastructure facilities, ample space for landings, parking of lorries, processing sheds, nearness to fuel bunks and service centres of engines, markets etc. The repeated occurrence of chaakara has made the beach wide enough to provide very good yards for curing of fish. Dry fish in huge quantities are being processed and transported from this centre to various inland and foreign

destinations. The study made in this centre shows that about 1750 crafts are making their regular landings in this centre excluding Mini trawlers, which are used to approach Valanjavazhy, the near by centre. The centre is active with the presence of about 150 commission agents, 100 brokers, 175 head-load workers and about 200 other workers. More than 300 vehicles are used to take the catches to various markets from the centre daily. An average turnover of about 2000 tonnes is registered in this centre, during chaakara days. More than 26 ice factories situated close to the centre undertakes the supply of ice-slabs regularly and there are 5 processing factories near the centre.

4. Arattupuzha Situated by the side of Kayamkulam backwaters, Arattupuzha is also a chaakara centre, where about 1000 crafts regularly make landings. Lack of proper infrastructure and distance from the main roads are the basic disqualifications of the centre. Situated in between the two major estuaries of the district, the Thottappally and Valiyazheekkal, the centre is highly safe for big Thangu vallams for launching and landings during rough seasons. Fishes of medium size like Mackerel, Sardines, Tuna etc. are the primary species in landings. It is estimated that about 500 tonnes of fish is landed at this centre during rough seasons daily. About 75 commission agents, 35 brokers, 75 head-load workers and 100 other workers are engaged at this centre. Ice-slabs for packing the produce are taken from a distance of about 15 Km. and about 65 vehicles are seen plying to the centre regularly to take the produce to the markets. The only road leading to the centre is the Thrikkunnapuzha Karhikappally road.

7.4 Analysis and Results of the Research

7.4.1. Study on the Micro Economy of the Traditional Fishing Households and the role of Commission agent it.

For assimilating domestic indebtedness, data were collected through a sample survey conducted at five villages selected at random. This survey was held during April - May 1999. For the purpose of understanding the requirements, supply and the sources of credit, it was found necessary to go into the details of this complex micro economy also. A sample survey was conducted for this purpose in five different fishing villages of Alappuzha district namely Thrikkunnapuzha, Vadackal North, Kanjiramchira, Chennaveli and Pallithodu South. Out of the 30 marine fishing villages of the district, these 5 villages were selected to represent all religious samples, fishermen using all popular classes of craft-gear combinations and different work groups. For this purpose sample respondents were selected from the popular craft gear combinations only viz. Thangu vala, Chooda vala, Mini trawler and Non-motorised craft owners. For analytical purposes, the sample households are grouped in to four categories of 30 families each according to the nature of craft and gear used by the main income earner. This approach is adopted to make a comparison between the level of dependence on debts by different technologies and the interest of commission agents in it.

TABLE 7.4- THE SAMPLE STRUCTURE FOR ANALYSING THE INFLUENCE OF COMMISSION AGENTS IN THE MICRO ECONOMY

Sample Household	Thrikkunnapuzha,	Vadackal North,	Kanjiramchira,	Chennaveli	Pallithodu
1. Owner members of Thangu vala units	6	6	6	6	6
2. Owner members of Chooda vala units	6	6	6	6	6
3. Owner members of Mini trawler units	2	10	10	5	3
4. Owners of non-motorised units	5	6	7	6	6

7.5.1. RESULTS OF THE SURVEY

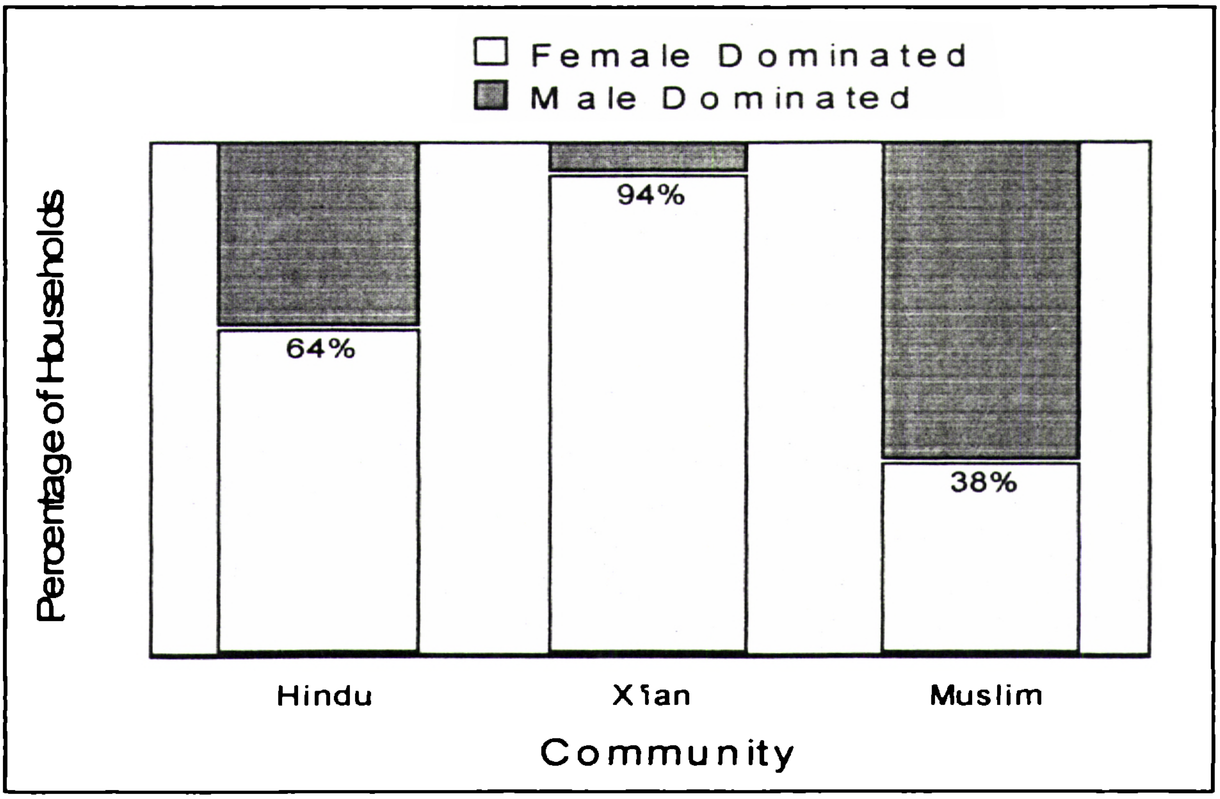
7.5.1.1. Subsistence Feature of Fishermen Households Fishing activity of the region is highly seasonal and so is their expenditure habit. The general pattern of living of fishermen community is that of 'subsistence' Over the years, fisher folk have created some informal structures that provide them with basic minimum necessities in a reliable manner. Therefore, it may not be possible to walk into a fishermen household and be offered some cooked food, which is left over. Of course, this cannot be taken as a sign of starvation. Usually, a family member goes over quickly to the nearby shop and buys something to offer for you. This on the other hand can be taken as an indication of the access to credit and generally holds true not only for the poorer fishing households but even for those who have substantial richness. Anita Abraham has analysed how this works in the poorer villages in Thiruvananthapuram district. She says "Subsistence credit caters exclusively to the subsistence requirements...the transactions of which involve no interest up to the limit of Rs. 100. Credit givers cannot be separated from credit takers because in the system of subsistence, lending is not strictly a function of surplus because even those houses which borrow may lend the borrowed surplus" She concludes that "such subsistence credit assures (i) a minimum level of consumption to the poor, (ii) for owner households it assures a regular supply of labour and (iii) for shopkeepers it ensures continuity of business" [1]

Subsistence has thus a social disposition- a system of interdependence, which is a distinct element of the traditional communities. This interdependence has kept their society going. It certainly works to the advantage of a few and to the disadvantage of many owing to the way in which the organisation of work has been structured. In the study of Plateau, where the features of the modern sector was also considered, it was reported that "consumption expenditure represents the major purpose for debts incurred by marine fishermen. However, the contributory share of credit in the financing of investment expenditures in fixed capital is high in all villages. Moreover, the absolute amount borrowed for basic consumption expenditure is not a monotonous function of the degree of poverty of the fishermen households. Due to the varying extent of loanable funds available in the credit market the relationship between the above two variables appears to be rather complex".[2]

7.5.1.2. Complex nature The household economy in the traditional fishing community is intricate, consisting of transactions twined with productive and consumer applications, managed by both earning and non-earning members, within and outside the household, involving cash and credit dealings. Out of the 120 sample family units surveyed, 96% respondents are unable to classify their daily expenses into productive and household. 89% were not able to recollect the total expenditure for past 1 month. 91% households are in the habit of using credit facilities for domestic purposes. In the case of 56% families, money is spent by all adult members for domestic purposes and among them 87% respondents are not concerned of it.

7.5.1.3. Female dominated The households of fishermen communities are predominantly female dominated, constituting 64% of the samples. In the case of 94% Christian families, housewife is in charge of domestic expenses. Among Hindu households the figure is 57% and among Muslim it is 38%.

CHART 7.3. DOMINATION OF HOUSEHOLD MANAGEMENT



7.5.1.4. Lack of Savings On the whole, the transactions are accomplished on a hand to mouth system buying for the day's needs, as the earnings are also dependent on the day's catches. The fishing community lives from day to day, considering the philosophy that the Kadalamma (Mother Ocean) cares for her children or, as the Christians would say, 'God will provide'. 84% respondent families follow this ideology.

7.5.1.5. Prominance of charity The dependence on nature for livelihood has made the people believe (i) that nature's bounties are limitless but (ii) that nature provides to satisfy needs and not for greed. Therefore, one should go fishing for food and on any day if there is a surplus that it is to be shared, or it can be used to buy the other little luxuries that daily survival efforts cannot provide. 98% respondents believe in charity and are used to spare for it.

7.5.1.6. Type of Tackles and Income Table 7.6 presents data on income and expenditure for the groups. The averages may be out of proportion because of the deviations, but the general picture is significant. On a per capita basis, the Thangu vala groups have came out the best. This is probably a realistic picture because these units are the best harvesting vessels though the landings are highly irregular. The Chooda vala operators come out next and here also the efficiency of the craft is excellent. Moreover, it must be recalled that these units use the most developed technologies and the members have developed a unique pattern of income sharing. On the other hand, the other two types of craft gear combinations contain limited membership, cheaper tackles, but assures more regularity in income, though meagre.

Borrowings by Thangu vala families are the highest, and their expenditure level is also far higher than the other groups. The incidence of borrowing is the lowest among non motorised families and mini trawlers and is identified with the comparatively regular nature of income and lower working capital requirements.

TABLE –7.6 - TOTAL INCOME AND EXPENDITURE OF HOUSEHOLDS

(Average for 4 months)

	Income (Rs.)	Expenditure (Rs.)	Borrowed (Rs.)	Saved/lent (Rs.)
Thangu vala	12,775	14,500	3,400	2,500
Chooda vala	8,450	8,620	2,390	750
Mini trawler	7,160	8,290	1,476	—
Non motorised	6,503	7,887	1,351	45

Source: Primary Data

The averages are estimates of approximates and it is therefore difficult to reconcile. However, the figures suggest the exact state of affairs of the fishermen households. There are vast differences in the expenditure habits, almost similar to the findings of Plateau in Sakthikulangara, where the mechanised fishing units had a much higher expenditure level than the other groups. In this study also, the confidence displayed by the motorised groups of larger investment is more salient to lending agencies. Ownership of more investments will definitely lead to better standards of living and higher living costs. The examples of individual fishermen, how they had gradually fallen into debt may be narrated. Fishermen who used their own accumulated savings to invest in the first craft and gear finally had to borrow the whole amount from the financial agencies for subsequent additions in a span of a decade can be considered a pointer towards future.

7.5.1.7. Excess Expenditure Over Income The mini trawler category and the non-motorised group, which together account for about one-half of the total active fishermen, seem to be in a very difficult condition. Income is lower than expenditure, which means that they are unable to make both ends meet. The data indicates that 50 per cent of the households face a life of great impoverishment. Of the Thangu vala owners, only 20 per cent have higher earnings than expenditure. These small surpluses are certainly consumed by their borrowing which means that they are really the target of big business which reaps the profits. In the ring seine group, because of their indigenous new ways of work organisation, about 30 per cent have succeeded in developing a strategy of survival.

7.5.1.8. Impact of Debts Table 7.7 indicates that in the members of groups with greater investment, are having more borrowings from both institutional and private sources. Almost 25% the income obtained from fishing goes towards the repayment of the personal or household debts of the members in the mechanised groups, while it is very limited in the case of non-motorised group. Here it should be noted that the income of the members of the fishing group is arrived at after deducting all the appropriations of the repayment of debts borne by the group. As far as the income of owners of non-motorised groups are concerned, the proportion arrived at in the table appropriated towards repayment of debts stands actual as, their investment on fishing equipments is negligible as against that of the motorised groups.

TABLE- 7.7. EXPENDITURE PATTERN OF SAMPLE HOUSEHOLDS

Expenditure	Thangu vala	Chooda vala	Mini trawler	Non-motorised
Food items	45%	51.9%	61%	63.4%
Education	2.6%	5.3%	6.8%	7%
Electricity, Fuel etc.	2.2%	4.5%	6.2%	6.5%
Cloth, cosmetics etc.	1.8%	2.2%	0.8%	1.1%
Other Expenses	6.6%	10.7%	14.5%	12%
Payment of debts	28.6%	22.8%	8.5%	1.6%
Savings	14.5%	2.6%	2.2%	2.4%
Average Expenses Rs. (100%)	14,500	8,640	8,290	7,887

Source: Primary data

From the above table the average ratio of household expenditure of different fishing equipment operators is clear. The inverse proportion in food expenditure is proportionate to the income levels and it never means that the non-mechanised fleet owners are spending more money on food. On the other hand, the pattern of expenditure reveals the low level of living among all groups of fishermen compared to that of other working groups.

7.5.1.9. Steadfast Indebtedness On an examination of the pattern of expenditure and income, it is seen that in the pevailing situation, the indebtedness will continue to exist. In fact, of the 120 respondents, only 16 families have an income, which is greater than their expenditure.

In the mini trawler category, the head of the household, Remesan, is actually a fish vendor and a fuel merchant. He started off as a fisherman, could not make it and then went in for both fishing and selling fuel and fish. He has only 2.5 cents of land. His wife Syamala is also a fish vendor and the two children do fish related coolie work. So, on the whole this is a very industrious family with no real assets.

Another head of the household in the mini trawler category is Babu. He has his own craft, gear and motor. He also has 25.5 cents of land on which he has coconuts which produce an income. His mother and sisters earn income from coir mat making. Of the monthly household income of Rs.10,712, around Rs.5,500 comes from activity other than fishing.

In the Thangu vala category, Alosious receives an income from fishing alone. He has 5 shares in the unit and only 4 cents of land. His son is also a working fisherman and they can just manage.

Kunju Mohammed has income from fishing alone with one share in the mini trawler but with 3 working fishermen. They have just 3.5 cents of land.

Elias has one share on the Thangu vala, 7.5 cents of land and 2 cows. Income from non-fishing sources is Rs.7,500 out of total earnings of Rs.18,000. His son is a OBE mechanic trainee and one daughter is a helper in the nearby crèche. This is also a hard-working family but their assets are certainly good sources of income.

All the other successful fishermen, whose family income exceeds family expenses, also have similar income sources, other than fishing. Thus, from the survey it is clear that the life, income and debts of fishermen of Alappuzha are just par with the minimum sustainable limit of less.

Generally speaking, almost all those who depend solely on fishing for livelihood are under the clutches of indebtedness. The exception is the non-mechanised sector where too only a small number of people obtain income from non-fishing activity. Of the 30 individuals with thangu vala, half get all of their income from fishing. One individual derives more than double his income from non-fishing activity and three individuals get a small portion of their income from other sources. In the other three categories, with the exception of one person in the mini trawler group, all the people receive their incomes from fish related activity alone. This really indicates that a fish worker is essentially a fish worker and has no other source of income.

7.5.1.10. Sources of Credit

TABLE 7.8 - ANALYSIS OF SOURCES OF HOUSEHOLD DEBTS

(Percentage of respondents borrowed)

Sources of Debt	Thangu vala	Chooda vala	Mini trawler	Non motorised
Institutional Sources				
Commercial Banks	6.66%	3.33%	16.67%	13.33%
PCARD Banks	20%	—	23.33%	3.33%
Matsyafed	80%	66.67%	60%	43.33%
Indigenous sources				
Commission agent	53.33%	36.67%	16.67%	6.67%
Moneylenders	70%	56.67%	60%	36.67%
Chitty, Religious funds etc.	43.33%	46.67%	63.33%	83.33%
Local traders	100%	100%	100%	100%

Source: Primary data

From the above table it is clear that there are many agencies to cater the household credit needs of the fishermen. The share of credit supplied by the institutional sources, in terms of amount is 37% of the total. The chief source of credit is Matsyafed. Through the NCDC schemes for housing and related amenities, Matsyafed had assisted almost all the households. The fishermen community as a whole is reluctant in approaching Commercial banks and Land Development Banks for credit. In their opinion, the bank credit is beyond their reach. Those who have availed the bank credit were in the form of gold loan. In Thrikkunnapuzha alone, there are some instances of availing credit from the PCARD banks. All those amounts were spent on housing.

On the other hand, almost all the amount borrowed from non-institutional sources was for consumption purposes. (87%) In 6 cases in the amounts were spent for marriage expenses. 97% of the credit provided by the commission agents was spent for household expenses during the days of meagre catch or off-season. In their opinion (88%) credit from tharakan is the most desirable one, since the inherent risk is the least in it.

7.5.1.11. Seasonal Variations in Income and the Method of Survival

The average monthly income of the fishermen households over a year, are prone to wide fluctuations. In a year there are months together, when they can hardly earn catch enough to cater the working expenses. However, the bumper catches made during the season or once in a while enable them to set off all the previous debts and to restore their credit worthiness. But evidently, they are unable to save something for the future. Therefore, the cycle of borrowing goes on to be repaid on a fine day of reaping wealth. In this cycle the most prominent helping hands are the local traders, commission agents and the moneylenders. Though a majority of fishermen are used to borrow from the religious funds, chittis etc. from those sources frequent and repeated borrowing are difficult. Further, debts from local traders and commission agents do not carry any interest. Though the Matsyafed is having a scheme for financing the fishermen households during the off season, there was not a single instance that came across this survey.

CHART 7.4. SURVIVAL OF OFF-SEASON

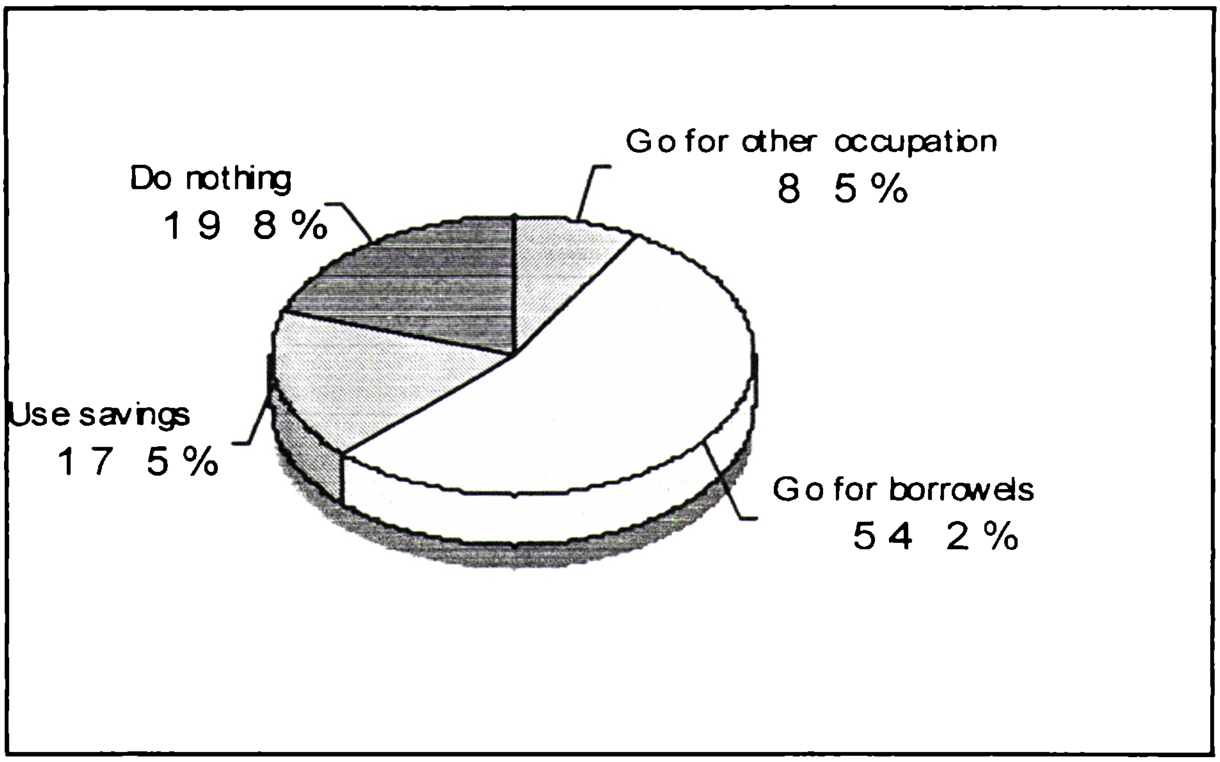


TABLE 7.9 – ANALYSIS OF SOURCES OF HOUSEHOLD DEBTS AND AVERAGE INCIDENCE OF BORROWELS / ANNUM

Sources of Debt	Thangu vala	Chooda vala	Mini trawler	Non motorised
<u>Institutional Sources</u>				
Commercial Banks	0.42	0.33	0.45	0.13
PCARD Banks	0.02	—	0.14	0.004
Matsyafed	0.8	0.6	0.32	0.12
<u>Indigenous sources</u>				
Commission agent	37.9	24.63	15.7	2.5
Moneylenders	4.22	2.5	3.52	1.5
Chitty, Religious funds etc	1.8	1.22	0.8	0.75
Local traders	200+	200+	200+	200+

Source: Primary data

The above table shows the average frequency of borrowels made by different family groups during the last five years. The difference in the proximity between institutional and private sources is evident from the table. Though most of the debts from commercial banks taken by the fishermen households belong to gold loan, that too is availed by the fishermen very seldom.

All the respondents have the practice of frequently resorting to credit purchases from the local shops and traders for their domestic purposes. Such debts are repaid within a few days and new debts are contracted on the following day itself. This debt is current and 64 % of the families are used to settle these debts with top priority.

The second most popular source of credit for fishermen households is commission agents, from whom money is borrowed by the families at least 20 times a year on an average. Funds are borrowed from him for all domestic contingencies like medical treatment, children's education, functions, festivals, house repair and for meeting off-season living expenses.

All the sources of credit except local traders and commission agents bear interest, which ranges from 16 to 120% per annum. Most of the money lenders and the religious funds deduct interest in advance.

In this context, the debts extended by the commission agents are worth special attention. Their financial support to the community is interest free, legal, sufficient and timely. 92% of the respondents are frank to admit that they are least reluctant in seeking his help. 47% take the assistance as their privilege and as a matter of right. Hence, the role of commission agent as a friend in need is evident from the analysis of the survey results.

7.5.1.12. Indebtedness As stated by Platteau in the late 70's, "the traditional economy of marine fishing is characterised by many market imperfections, segmentations and inter-linked sets of personalised transactions. Yet, it does not bear any major resemblance to a 'feudalistic' or pro capitalist world of hereditary and completely asymmetric relationships stretching over indefinite periods of time. This should of course not be taken to mean that there is no problem of domination within fishing communities nor should be taken to imply that all members of these communities have equal bargaining powers". There are two types of inter linkages in the traditional fishing villages: (i) an inter linkage of credit and labour relations; and (ii) an inter linkage of credit and marketing of the produce.

TABLE-7.10. REASONS FOR INCREASE IN HOUSEHOLD DEBTS (OPINIONS)

(Figures in percentages)

Reason	Thangu vala	Chooda vala	Mini trawler	Non motorised
More expenditure than income	58	8	2	36
No regular income	46	72	98	38
No other source of income/skills	16	62	4	4
Too many dependents	8		18	
No increase in debt	10			

Source: Primary Data.

While Platteau's study went into these interlinkages in great detail, here, only a reference is made to look into the fishermen's own perceptions regarding their situation of indebtedness. The study found the saying 'fishermen are born in debt, live in debt and die in debt' being true in Alappuzha strangely enough in the predominantly Christian areas. But even here the fishermen have begun to refute this saying. They feel that bondage to the moneylender does not exist to the extent it did earlier and their credit worthiness has increased. Although traditional money lenders have practically disappeared, money lending goes on. It is uncommon or very rare to find a fishing family that has no debts, but this is true for any other sector of the economy today.

Nearly 85 per cent of the respondents reported an increase in debts for the reasons indicated on Table 7.10. The main reason given for the increase in indebtedness is the lack of regular income from fishing, which also implies that no efforts are made to save some of the income in the good seasons. When we examine the actual items for which money was borrowed and the average amount of borrowing for the purchase of these items, the picture is interesting (Table 7.11). Table 7.11. gives a consolidated picture of the previous table. It indicates the loans that have been taken for productive and non-productive purposes. We notice that loans for both productive and non-productive purposes are highest in the motorised sector. The figure is higher in Thangu vala group because of house construction, and in general, the figure is inflated because of one high dowry. Both these cases fall into the first rank categories which imply that they have more access to finances.

TABLE-7.11. BORROWINGS FOR PRODUCTIVE AND NON-PRODUCTIVE PURPOSES

Group	Purpose	No.of cases(%)	Average amount
Thangu vala	Productive	80	11,963
	Non-productive	20	10,790
Chooda vala	Productive	92	11,212
	Non-productive	08	11,131
Mini Trawler	Productive	89	4,050
	Non-productive	16	9,069
Non- Motorised	Productive	52	9,329
	Non-productive	98	7,669

Source: Primary Data.

In non-motorised sector, the debts for productive purposes are strikingly low and the number of people who have borrowed is also few. This has to do with the motorisation and adoption of related technologies. In Thangu vala group, where the carriers have been introduced in a similar manner but more recently, such debts are also lower than in other areas. This is an indication of how communities find their own ways of coping with new demands leading to more healthy participation. The higher non-productive loans in non- motorised and the larger number who have taken are for purposes like education, medical treatment, marriage of girl children, job advances etc. Chooda vala group is the only area where the loans for productive purposes are substantially higher than loans for non-productive purposes. In Thangu vala and Chooda vala groups, only individual loans are recorded.

TABLE-7.12. DEBT PICTURE

Reason	Thangu vala No.of Cases%	Thangu vala Average amount	Chooda vala No.of cases%	Chooda vala Average amount	Mini trawler No.of cases%	Mini trawler Average amount	Non motorised No.of cases%	Non motorised Average amount
PRODUCTIVE								
To buy engine			11	10000	68	36,000		
To buy craft			12	38000	57	37500	45	17000
To buy gear			18	23,500	64	6,800	47	25,300
To take share in unit	65	36,000	62	24,500	19	11,000		
To extend gear			3	2,800			2	4500
To repair engine	15	5,800	5	7,300	26	2,500		
NON-PRODUCTIVE								
Household	14	2,900	21	2,500	22	4,600	16	3,400
Construction	2	24,000	15	9,300	19	7,000	6	7,250
To pay dowry	6	12350	15	8500	2	14250	4	8500
To buy gold	2	6500	2	15,000	5	25,000	16	10,500
Others			21	2500	19	7100	5	3500

Source: Primary Data.

The fishing units also have a 40-50 per cent collective loan that is paid back from the total catch in the share that goes to the tharakan when he makes his final reduction of the principle amount. So, here again it is those with a smaller share who will have still lower surpluses as the gross returns are reduced. Those really at the bottom of the ladder get squeezed most. Those who do not want to be left behind in the modernisation race, because they are good fishermen have no other option but to be thrown into greater debt, in order to survive. Even if the ring seine operations as such do prove to be economically viable, the shares on the ring seines are not equally divided and, therefore, the benefits still accrue to those who control more of the shares.

Table 7.13. shows that the borrowings against gold ornaments in Mini trawler group are high. These constitute assets in the dowry of a woman and these ornaments can traditionally be used to help add productive assets in the family. So, it is seen that women easily give up their jewellery, retaining mainly the silver waist band which is a sign of marriage. Looking at the data for Mini trawler group, we notice that with the exception of one woman who has acquired 2 sovereigns of gold more than she had at marriage, all the rest have lost significantly in different measures, some being left with absolutely nothing.

TABLE-7.13. LOSS OF GOLD JEWELLERY FOR NEED OF FUNDS (in grams)

Type of Unit	Gold at marriage	Gold in hand now
Thangu vala	16.5	3.8
Chooda vala	12.3	5.3
Mini trawlers	10.6	4.5
Non-Motorised	12.5	8.0

Source: Primary Data

Even from these simple measures, it can be inferred that the situation now is more complex than at the end of the last decade. Platteau compared the complexities of the traditional and the modern sectors, taking the mechanised boat sector of Sakthikulangara as an indication of changes in the modern sector when fishing capital endowment per household worked out roughly to Rs.68,000 for the fishing units and to Rs. 4000 for the traditional craft owners. Today, the very nature of assets of the traditional sector has changed and some of the recommendations made earlier by Platteau to "sustain" the traditional sector have actually been implemented.

7.5.1.13. Institutional borrowing The study tried to look into the sources of borrowed finances to assess the relative share of agencies. Earlier, the money-lenders were the main source of finance, a monopoly source. After a short gap of two decades of organised institutional finance, they are again emerging as the highest lending group but have fallen in importance. There was also significant borrowing from friends and relatives earlier and this category has become less important. The merchants who came third earlier are even less important now. The old situation has been unsettled by the entry of the banks and the co-operatives while the blade companies seem to play a very minor role. However, it is seen that there has been no major or radical change in the borrowing patterns although there are many more institutions to borrow from. New co-operatives and agencies like the Matsyafed have their own limitations in meeting the ever increasing needs. Banks too have formalities and it is only those fishermen who already have assets who feel confident to borrow from the banks. So, although the loans taken from the money-lenders are at higher rates of interest, this source of borrowing is indispensable to the economy of the community.

Platteau who went into great depth regarding the money availability and indebtedness factors go into details on what they called 'free loans' -which are taken either from each other or from the village shopkeepers without interest. By looking into the daily income-expenditure data, it is found that the practice of 'free loans' still exists but that the use of this credit source varies according to the kind of fishing undertaken. For instance when owners are able to advance better collateral, the role of institutional credit is more significant. In fact, according to

Platteau, while the incidence of credit was considerable in all fishing villages the level of gross indebtedness was much higher in Sakthikulangara than in the traditional villages, where the modernisation was then on drive. Within each village as well as across the villages a positive correlation was noticed between the ownership position and the indebtedness level of the households. The size of the productive expenditure played a crucial role in determining the absolute level of the household's gross indebtedness. But this indebtedness for consumption purposes being much higher in the motorised groups than in the non-motorised groups, could be considered a reflection of economic advancement and not of the impoverishment of techanically advanced fishermen.

TABLE 7.14. ANALYSIS OF SHARE IN INVESTMENT DURING THE 10 YEAR PERIOD FROM 1985-1995 - PURPOSE WISE

Funding	borrowed for				
Agency	equipments	working funds	housing	consumption	other purposes
1. Commercial Banks	16%	7.25%	2.6%	24.3%	14%
2. Matsyafed	68.5%	0.00	34.5%	0.00	0.00
3. PCARD Banks	7.6%	2.5%	16.3%	0.00	6.8%
4. Religious funds	2.3%	6.5%	3.2%	6.8%	8.2%
5. Money lenders	8.8%	16.5%	0.28%	32.4%	15.3%
6. Share subscribers	5.6%	12.0%	0.00	0.00	0.00
7. Commission Agency	100%	68.8%	0.12%	8.35%	12.88%

Source: Primary Data

The discussions with the banks and tharakans project a confused picture about the extent to which fishermen return the amounts of loan taken. The banks say the repayments are irregular but do not disclose any figures. In Kanjiramchira, the co-operative takes care of bank repayments and hence, the fishermen have greater credibility. In Vadackal, as the tharakans also control the sales and get a share as interest, the auction prices are high and the repayments from the corpus funds of the unit also high and well-managed too. It is in the borrowings from local moneylenders and friends that an assessment of how much of the principle amounts are actually returned, becomes difficult.

TABLE. 7.15. REPAYMENT OF DEBTS BY SAMPLE UNITS

Creditors	Mean amount of debt	Rate of Interest	Mean period of repayment	Overdue/ unpaid
Institutional Sources				
Commercial Banks	45,800	12.5%	5.62 years	62.88%
PCARD Banks	32,500	14.5%	12.8 "	84.33%
Matsyafed	89,200	11.25%	6.6	33.33%
Indigenous sources				
Commission agent	1,21,325	0.00%	—	100%
Share subscribers	1,10,500	0.00%	5.9	92.8%
Moneylenders	12,260	120.0%	1.45 "	0.25%
Chitty, Religious funds	6,950	82.22%	2.8	2.65%
Friends & Relatives	26,500	10.5%	4.8	55.5%
Other traders	4,250	0.00%	0.07 "	12.3%

Source: Primary Data

Table 7.15 shows the level of performance in repayment of debts by the sample fishing units. The rate of recovery of loans is highest in the case of money lenders, which shows the success of his recovery proceedings. The relative success of Matsyafed among the institutional sources is due to the favourable terms and conditions of repayment. The figures convey the message on debts by tharakan, that the amount is not to be repaid. The reasons for non-payment of debts are given in the following table.

TABLE 7.16. REASONS FOR NON PAYMENT OF DEBTS BY FISHING UNITS (INSTITUTIONAL)

Reason	Commercial Banks	Matsyafed	PCARD Banks
Diversion	12.25%	2.25%	35.55%
Insufficiency	42.5%	32.35%	52.85%
Continued losses	56.55%	65.25%	55.0%
Mismanagement	52.85%	75.5%	62.35%
Accidents, loss of assets	0.07%	0.85%	0.45%
Lack of refinance	42.85%	2.65%	65.25%
Non-suitability of terms	88.8%	9.5%	78.45%
Deliberate	18.5%	5.25%	25.0%

Source: Primary Data

7.5.1.14. The other Results of the Micro Economic Survey

1. The majority of the supply items consumed have to bought from the market for cash (84%). This means that fisher folk are totally dependent on the market for their requirements, except for fish. 24% of the people have coconuts from their own gardens and 9.5% families get some milk and eggs from their own cattle and birds. In about 38.5% of the families, the children get a noon meal in school as a part of the Government's supplementary feeding programme.

2. There is the common habit of eating from hotels (64%) among all the categories of fish workers.

3. Liquor consumption seems to be minimal (24.3%) and many of those who drink report that the liquor is given to them by others (64%) mainly the working unit. But, there is reason to doubt the information on liquor consumption because it is generally recognised that except in Muslim areas, consumption of liquor on a daily, basis is popular. Moreover, their husbands do not tell women how much is actually spent on liquor and men do not want to admit to the exact amount spent.

4. Firewood is the main source of fuel (94.5%). Only 8% families do not spend money on firewood because they get it from their own precincts or locality.

5. Kerosene is used for lighting (77.7%) and consumption is generally within limits, except in the families with ring seines, where it is quite high, indicating that some of it is used for cooking too (18.5%).

6. People mainly eat rice and fish. Their diets also include vegetables, fruits, meat, pulses, oil, milk and egg. But the consumption of these items varies according to economic status and from centre to centre. The richer families consume all the foodstuffs in a proportionate quantity (26%) except for meat (8.5%). The poor group consumes lower amounts of pulses, egg and milk and no meat. The consumption of tapioca is higher among this group. So, starch is the main component of their diet. In Chennaveli, the items consumed are more or less the same in the rich and poor groups. Pulses and eggs are less frequent in the diets here. People consume tapioca in large quantities. In Vadackal, the rich group consumes 11 kinds of foodstuffs. But the poor group consumes only a very small quantity of meat, eggs and milk. The consumption of tapioca is lower among the poor. Average consumption expenditure is lower in Vadackal than in the other areas. The men in Vadackal get one meal from the hotel as part of the common expenses on a fishing day. In Pallithodu, both the groups consume all foodstuffs but there are slight variations in the quantity. The rich groups consume more eggs and milk, while the poor group consumes more tapioca. Here, people consume more sugar, coconut and oil compared to other centres. In Thrikkunnapuzha, consumption of meat and egg is also very low. The poor group consumes vegetables and pulses in moderate quantities. The consumption of tapioca is very minimal. Here also, people frequently go to hotels and so the actual consumption may be higher. Kanjiramchira, therefore, is probably the only place where the level of consumption is satisfactory. While it cannot be said that people in the other areas are malnourished; in Thrikkunnapuzha certainly there is enough food only to meet subsistence needs. This could be due to the poorer access to free consumption loans in this area compared to Christian and Muslim areas. In general, people in Thrikkunnapuzha get more than 50 per cent of their calorie intake from the consumption of one item - rice. The data also

shows that the consumption expenditure varies from season to season. This means that the quantities of food and the quality also vary correspondingly. This is a typical characteristic of communities that live at a level of subsistence. There is no basic minimum that is assured throughout the year. Whereas the daily monitoring of income and expenditure has not helped to determine the exact nutritional intake pattern, it has indicated the pattern of consumption. The data substantiates the finding that expenditure is also generally higher than income which throws open a series of other questions: What are these perpetual sources of credit? How do those creditors who lose out, manage? The earlier credit and indebtedness studies assess the extent of credit and indebtedness only, but the underlying sociological phenomena which sustain this state of affairs have not yet been unravelled.

7.6. STUDY ON THE ECONOMIC EFFICIENCY OF THE TRADITIONAL FISHING UNITS AND THE ROLE OF COMMISSION AGENT IT.

7.6.1 Capital Composition

7.6.1.1. Owned Capital In traditional fishing sector, generally, the quantity of owned capital in the asset is very low. According to the practice of Matsyafed, the borrowing groups are not required to contribute anything towards margin money. The capital required even for assembling the gear, oiling the craft etc. are being financed by the Matsyafed, bringing down share of the group in the cost of capital asset to zero.

7.6.1.2. Sources of Margin Money Formerly, when the commercial banks were the primary source of assistance, margin money requirements were met through the assistance of Tharakan. Even the cost of taking passport size photograph of the borrowers was met through the borrowings form commission agent. In fact, the commission agent was the force to encourage the groups for borrowing from the financial institutions and procure the advances gear and engine.

TABLE 7.17. PURPOSE WISE CLASSIFICATION OF SOURCES OF DEBTS CONTRACTED BY FISHING UNITS

Funding Agency	Borrowed for
Commercial Banks	Procuring Capital Assets
Matsyafed	Procuring Capital Assets
PCARD Banks	Procuring Capital Assets
Religious funds	Margin money, up-keep of gear & OBE
Money lenders	Working Capital, Maintenance of OBE
Share subscribers	Maintenance of Craft, Gear & OBE
Commission Agency	All Purposes

Source: Primary Data.

7.6.1.3. Proportion with Institutional Debts The outcome of study conducted on the most successful samples shows a different result. Out of the 250 samples analysed, 97 (38.8%) groups are found most successful and all these 97 groups are having capital contribution from all the members of the group. 69 groups have settled their institutional debts and the only debt outstanding is the advance of tharakan, which they do not consider a debt. The groups without debts other than from tharakan are:

Thangu vala units	19
Chooda vala units	11
Mini Trawlers	22
Non-motorised	17
Total	69 (27.6% of the total)

7.6.1.4. Initial Capital Investment The average initial capital contribution is Rs. 18,600 per share. The maximum amount of a share is observed as Rs. 40,000. The present value of the owned capital of these groups is an average of Rs. 6,04,700. It is further observed that the number of groups classified below the success level with capital contribution is six i.e.. 12%. Thus capital contribution on the part the group members can, be considered factor for the success of the group.

TABLE- 7.18. FINANCIAL HIGHLIGHTS OF THE SAMPLE SURVEY

Particulars	Thanguvala	Choodavala	Gill-netters	Mini-trawlers	Non-motorised
Fixed Capital					
1. Craft	3,15,500	1,59,000	42,000	46,000	22,000
2. Gear	3, 86,000	1,84,000	69,000	7,150	4,800
3. OBE	6,18,000	1,67,000	64,000	56,000	—
4. Carrier Craft	68,000	—	—	—	—
5. Winch & Engine	86,000	—	—	—	—
6. Cell Phone	9,000	—	—	—	—
Total Fixed capital	14,82,500	5,10,000	1,75,000	1,09,150	26,800
Capital Split up					
1. Owned Capital	4,75,000	1,98,000	45,000	35,000	16,000
2. Institutional Credit	7,15,000	2,25,000	70,000	40,000	—
3. Commission Agent	2,92,500	87,000	35,000	19,150	—
4. Friends & Relatives	—	—	25,000	15,000	10,800

Source: Primary Data

7.6.2. FINANCIAL POSITION ANALYSIS

The traditional fishing units are not used to keeping books of accounts of any kind. The only record of transactions available was the dairy kept by the leader of the group. The dairy usually shows the proceeds of the day and disbursements of share to members of the group. In some cases the daily expenses of fuel, transportation etc. may also be recorded. However, figures relating to cost of assets, loans, repayment debts and other balances are not available from the records. The only sources for these figures are the memory of the group members and some bills, notes etc. An attempt was undertaken in this study to collect the necessary figures for financial analysis of the sample groups. The sample fishing units and commission agents were supplied with diaries for recording the daily operating results in an orderly manner. The figures relating to landings, daily expenses and income were collected from these records. Accordingly, records for the four year period from 1997 to 2000 were collected.

TABLE- 7.19. PERFORMANCE OF DIFFERENT CRAFT GEAR COMBINATIONS

(for the period of 12 months ending on 31st December 1999)

Particulars	Thanguvala	Choodavala	Fibrecraft	Minitrawler
Sales/day	18200	7850	3400	1780
Fuel	3100	1280	785	360
Transportation	750	450	—	—
Commission	1820	785	340	178
Gross proceeds	12530	2335	2275	1242

Source: Primary Data.

TABLE 7.20. ECONOMICS OF DIFFERENT CRAFT GEAR COMBINATIONS

Particulars	Thangu Vala	Chooda Vala	Gill Net	Mini Trawler
Investment (Rs.)	2,67,000	96,000	29,000	22,000
No. of days P/A	176	121	146	195
Average catch / day	12,600	5,650	2,400	1,240
Commission Rate	5%	5%	5%	5%
Income per day (Rs.)	630	282.50	120	62
Annual Income (Rs.)	1,10,880	34,182.50	17,520	12,090
Rate of return	41.53%	35.61%	60.41%	54.95%
Pay back period	2.41	2.81	1.68	1.82

(Based on mean Investment and results of model units- @ 1998 prices)

Source: Primary Data

Sources of figures and the rationale

7.6.2.1. Sales The values of sales proceeds of the groups were calculated from the dairy of the group leaders. Though, most of them were recording proceeds of every day it is understood that they ignored sales proceeds of smaller amounts or have recorded amounts that are large enough for sharing after meeting the expenses of the day. Thus the reliability of the dairy is very low. Due to this constraint an effort was taken to collect the details from the dairy of the Tharakan. There too most of the tharakans were not maintaining the dairy in any reliable manner. Some of them recorded all sales in their dairy while the others never kept any records of transactions at all. They prepare chits showing sales of each craft reaching the beach and on settlement of proceeds either hand it over to the group or tear down it. Thus that attempt also failed. In order to have a closer study, some 12 groups were supplied with and required to maintain minimum entries in the dairy for some period and they were helpful enough to understand its need. At the same time the figures available from all the above sources were entered into the data sheets, following every visit. As a result the following figures were made available.

a) Daily expenses for fuel, transportation and bata.

b) Sales proceeds for the day before adjusting commission and deductions by the Tharakan.

c) Other expenses if any for the day.

d) Cash receipts from Tharakan and amount disbursed as share.

e) Repayments of loans etc.

On the basis of data so made available the following analysis is done.

7.6.2.2 Expenses of fuel Among all other expenses of the fishing group, the cost of fuel is the primary item. Nowadays, it is becoming the primary limiting factor for the sector also. Today expenses for fuel and maintenance of engine are two major items in the current expenses, which have gone up considerably since the cost of fuel and the rate of consumption increased along the enhancement in the capacity of the engines. The government and the Matsyafed provide the fishermen with subsidies and kerosene permits for engines only up to capacity of 10 H.P. As a result the kerosene quota sanctioned to a unit is far below the actual consumption and therefore the fishermen are forced to buy kerosene from local black markets at a price of more than 3 times the ration price. Technically ignorant fisher folks are well exploited by the oil and kerosene dealers also. There is a group of kerosene and oil suppliers in the coastal villages of the district who work as the outlets of black marketers of kerosene and recycled engine oil. Interviews conducted with some of them reveals that they charge Rs. 14/- per litre. for kerosene for which the market price is Rs. 6/- per litre. under open market non-subsidised kerosene and less than Rs. 6/- per litre for coloured subsidised kerosene. The Two-stroke 2T grade oil supplied by them is either recycled engine oil or diluted diesel engine oil by mixing with diesel. Petrol usually contains kerosene of equal quantity, and they charge 12/- per litre being transportation expenses. On the other hand they allow credit facilities to the fisher folk for fuel supplied by them.

TABLE - 7.21. - AVERAGE FINANCIAL PERFORMANCE OF DIFFERENT CRAFT GEAR COMBINATIONS

(for the period of 12 months ending on 31st December 1998)

Particulars	Thangu vala	Chooda vala	Fibre craft	Mini-trawler	Non-motorised
Sales/day	18,200	7,850	3,400	1,780	680
Fuel	3,100	1,280	785	360	—
Transportation	750	450	—	—	—
Commission	1,820	785	340	178	—
Gross income	12,530	2,335	2,275	1,242	680

Source: Primary Data

The above figures are averages of successful days, and may convey a false positive impression of richness. In practice, the number of this sort of successful days are very low, over a year. However the figures can be used to convey the idea on the income of the group and the proportion of the earnings of commission agents.

The study reveals that the average take home income of the motorised groups is mostly going lower than that of the non-motorised groups. This disparity is primarily due to the huge spending for fuel, which takes away all the money received by way of the price of fish landed. The fuel expenses spent on days with nil or minimal catch are to be absorbed from the income of those days generating some income. Due to various reasons, which need further investigation, the proportion of successful days are coming down year by year, restricting the units enjoy the blessings of successful days. 98% of the fishing groups are of the opinion that there should be an urgent review of this situation and they are exasperated of the OBEs.

On the other hand, this situation is drawing more and more fishermen away from the fancy for bigger motorised crafts and they are gradually going back to conventional non-motorised crafts.

7.7. Ownership of craft and organisation In traditional fisheries, the means of production were under feudalistic ownership of some families or persons who provided the craft, gear and accessories to a group normally organised under the leadership of a senior angler. The group leader was to pay either rent for the craft or a share of the sale proceeds of the day in return. This share for rent ranged from 40 to 60 %. The group leader occupying the role of tenant, paid the members of the group a share of the proceeds or wages in return for their labour. Most of these craft owners were not active fishermen and many of them belonged to communities other than fishermen doing some other profession. However, some fishermen managed to own some small crafts of their own like Kattamarams, Dappa, Dingi etc. and elementary gear like small drift nets, hook and line etc. A form of shared ownership was also popular based on the joint family structure in which the operational unit included all the adult male members of the family.

Following motorisation, in the northern districts, the most important change during the decade has been the introduction of the ring seine operations, while in Southern and Central Kerala there have been drastic changes in the craft and ownership as well. The large Thangu vallams replaced the local canoes- the fibreglass boat replaced the traditional Kattamaram and with it originated the joint ownership pattern. This new system became popular in Kerala and other states, which took the form of neighbourhoods or localised groups. The initiative for this movement was primarily the rules of NCDC and the Fishermen welfare and development societies, under which the modernisation finance was limited to groups. In a short time it went further than mere shared ownership. It took the form of small worker-owned companies with their own rules and regulations. The groups are of about 40 persons bringing shares together and deciding to operate on the basis of division of labour amongst themselves, each being entitled to equal returns. All the shareholders are required to go out for fishing. Usually the crew size of the group range from 30 to 35 men recruited on a rotation basis and the others have to be present on the shore at the time of the launching of the craft and when it returns. Those who do not go fishing have to assist with shore activity. However, for a share in the net income of the day, the member has to be present at the shore. There is a captain or leader of the team who is entrusted with the management of the affairs of the group including transaction of money.

While increased investment in craft and gear and the involvement of co-operation necessitated changes in the organisation of labour, it did not lead to development of greater community management of fishing. For example, in the early 60s when the trawlers were introduced in Kochi, after initial operation the community decided when and where the trawlers would operate as compared to the traditional nets. Thus, an understanding was achieved regarding the exploitation of the fish resource and in cases of social conflict. But no such communicant control seems to have followed when the OBEs and the ring seines were introduced. Even in Alappuzha, where the community realised the need for shares while investing in large craft and gear the objective of the "companies" has been to acquire more working units. In Pallithodu, some units play a subsidiary role. Fishermen who could not muster resources either to invest in an engine or to have a share in the new units have retained their craft and act as carrier boats to the larger units. They are towed along by the larger units and bring home the catch as the big boat comes back with the huge net and the crew. So while the towed (carrier) boats do not fish, they share in the profits; a new division of labour on the one hand and an utilisation of existing resources on the other. It must be added, however, that shares are by no means equal. Shareholders may have a full share, or a part of a share. But this pattern of share-holding in Pallithodu has created its own problems as group discussions with several younger fishermen have revealed. While introduction of the larger crafts, especially the new big crafts, has led fishermen to adopt the pattern of shared ownership, these shares are not equal. There are some who have a 1/10 share or even a 1/5 share, but there are others who may have a 1/20 or 1/25 share. This makes for big differences when the share is divided 40:60 between capital and labour. The young men call this the coming of capitalism because, now there are also non-fishing owners with big shares. This leads to, what they call, 'unemployment'. The bigger shareholders have the right of employing the labour they like. Many of them have chosen to employ workers from outside who are used to operating the nets. The local youth feel that they have been deceived in the process. Paradoxically, at first, the village had rejected the idea of introducing the ring seines. But it was the youth that had pushed for it thinking it would generate employment because each unit needed 40 workers. But now, the youth are at the mercy of the owners, not having resources for investment.

The non-working owners who constitute an important aspect in share owning is indespensable, based on an inspection of the labour market and credit relations. A comparison of the changes accompanying trawling and motorisation is useful. Plateau's study in Sakthikulangara showed that where the 32 feet trawl mechanised boats were introduced almost 66 percent of the fishing units had never been regular fishermen in their lives. Of the other 34 per cent, the majority stopped active fishing within a few years. They shifted to a commercial occupation related to fishing that helped them accumulate sufficient assets to put them in a sound financial position. Platteau preferred to call this class "merchant capitalists" as they stood on the verge of being pure financiers and renters[3] However, changes within the traditional sector have not followed this pattern. All the motorised craft in Kanjiramchira and Chennaveli are owner-operated and in Vadackal, Pallithodu and Thrikkunnapuzha, where the ring seines operate, a non-worker owner group has emerged. But, it is significant only in Pallithodu where it has contributed 20 per cent of the capital. Nevertheless, unlike in Sakthikulangara, where the incidence of tied loans decreased with the increased investments, in the case of the ring seines the role of the tharakans moneylender cum auctioneer is significant. This has had both a negative and positive effect on the borrowers. The positive aspect is that since, either a 5 per cent auction charge (as in Pallithodu) or one share of the catch needs to be paid as interest and the principal returned only when the catches are good, and sometimes no at all paid, the fishermen are willing to risk borrowing large amounts regardless of repayment. The negative aspect is that they are not free to auction their own catches. Nevertheless, in Vadackal, the tharakans have been able to get the best possible prices, whereas the fishermen in Pallithodu and especially Thrikkunnapuzha probably suffer from this dependence, in that prices are very low.

With the coming of the ring seines, the earlier gear has become defunct. Some of the families have equipment worth Rs. 50,000 to 60,000 and all this is now dead investment. The traditional family fishing is now carried on individually, breaking up all the old family-based support structures. The individual borrowing makes people highly dependent on the tharakans and merchants who lend money. They say that the merchants have always been exploiting them because they provide the loans in poor fishing months and have the right to auction the fish and take a 5 per cent commission. Now, together with the addition of the 5 per cent, even greater indebtedness has resulted.

Opinion against operating ring seines at night has been expressed by even the northern fish workers who are in favour of this gear. In Alappuzha, the workers themselves have stopped the night use of ring seines since 1989. They also favour stopping the use of lights while fishing given the excessive amounts of kerosene needed, which has often to be bought on the black market, given the shortfalls in kerosene supply, and thus is a financial drain. Besides, this modernisation is based on non-renewable resources like oil and nylon (for nets). The boats are made of wood that is also becoming a scarce resource. An all-round control of various aspects of fishery alone can prove to be a sustainable alternative.

7.7.1. Ownership of craft and change in technology In the northern areas, significant modification has taken place in the case of the ring seine operations only, whereas in Southern and Central Kerala there has been a radical change in the craft as well. The large Thangu vallams replaced the local canoes and along with it a change in the ownership of units took place viz. the shared ownership. Though there was a form of shared ownership to some extent all over Kerala, this new system took the form of an equity holding, found in joint stock companies. Formerly, it was based on the joint family structure in that the operational unit included all the adult males of a household. This collective unit has continued with the craft remaining the same. When the new large plank built crafts were introduced in Kerala, shared ownership of craft and gear evolved, as investment needed for a unit could be around 3-6 lakhs of rupees in 1989. In a Short time it went further than merely shared ownership. It went into organising small worker-owned companies with their own rules and regulations, i.e. groups of 40 persons bought the shares together and decided on a division of labour amongst themselves, each being entitled to equal returns. For instance, not all 40 shareholders are required to go out fishing. Between 30 to 35 men go out fishing but all have to be present on the shore at the time of the launching of the boat and when it returns. Those who do not go fishing have to assist with shore activity. Absence on the shore means no share of the catch that day.

7.12. ROLE OF COMMISSION AGENTS

TABLE 7.22. STAGES OF DEVELOPMENTS IN TRADITIONAL MARINE FISHERIES AND THE PROMOTERS

Technology	Year	Introduced by
1. Hooks & Lines, Kattamaram	Unknown	Unknown
2. Casting net	before 1800	Europeans
3. Dug out Canoe	before 1900	Indigenous Artisans
4. Gill Net	1930 1950	British Entrepreneurs
5. Chinese Net	1930 - 1950	British Entrepreneurs
6. Shore scine Net	1930 1950	Feudal Fishermen
7. Plank built Canoe	1930 1950	Indigenous Artisans
8. Drift Net, Encircling Scines	1930 1960	Commission Agents
9. Purse Scines	1970 1980	Commission Agents
10. Out board engines	1975 - 1980	Commission Agents
11. Disco Nets	1980 - 1985	Commission Agents
12. Fibre glass Crafts	1980 - 1985	Govt. agencies
13. Mini trawlers	1985 - 1990	Commission Agents
14. Winches on Ring Scine crafts	1995 - 2000	Commission Agents
15. Inboard engine fitted crafts	2000 - 2001	Commission Agents

Source: Primary Data

The above table (7.21) shows the involvement of commission agency in traditional fisheries. Except for the introduction of fibre glass beach landing crafts, the contribution of the handsomely paid researchers and development agencies are that of commentators, who prepare reports for publication of what is happening. The commission agents, on the other hand, have been leading the sector towards more efficiency, skill and economic growth. The table 7.22 gives the results of the enquiry into their role.

TABLE 7.23. PERCENTAGE OF COMMISSION AGENTS HAVING PRACTICE OF -

Promoting new fishing groups	34.66%
Supporting for adopting new technology	87.25%
Helping to buy latest equipments	77.66%
Requiring enlarging capacity	72.50%
Financing for maintenance	82.33%
Financing for working capital	65.35%
Financing for off-season domestic needs	28.65%
Assisting to pay debts	12.88%
Assisting to meet domestic contingencies	36.45%
Charging interest on all loans	05.25%
Appropriating towards repayment regularly	36.55%
Appropriating ad-hoc loans immediately	74.25%

Source: Primary Data

Different from all other debt providers, the commission agents are keen on maintaining the sector feasible. Almost all the financial requirements of the fishermen are well attended by them. Here the most striking feature is the concept under which the assistance is made. The following table depicts the way in which the money advanced by him is treated.

TABLE 7.24. PERCENTAGE OF THARAKANS CONSIDERING INVESTMENT AS-

Loan	18.85%
Deposit	22.25%
Security	08.55%
Capital contribution	33.30%
Profitable investment	16.88%
None of the above	00.07%

Source: Primary Data

TABLE 7.25. INVESTMENT IN COMMISSION AGENCY

Above 100 Lakhs	00.07%
100 - 75	00.15%
75 50	00.35%
50 - 40	00.93%
40 - 30	02.52%
30 - 20	18.85%
20 - 10	22.25%
10 - 5	35.33%
Less than 5	19.45%

Source: Primary Data

Most of the commission agents in Alappuzha belong to the traditional fishermen community. They were formerly active fishermen, who found their new role more economic and prestigious. Most of them have made the investments by using funds borrowed from the common sources.

TABLE 7.26. SOURCES OF FUNDS - PERCENTAGE OF COMMISSION AGENTS USING FUNDS FROM -

Own funds only	22.25%
Loan from Commercial Banks	17.85%
Loan from PCARDB	02.25%
Loan from Co-operatives	12.25%
Other Institutions	16.50%
Money lenders	02.45%
Religious funds, nidhis, chittis	18.85%
Friends & relatives	22.75%

Source: Primary Data

Form outside it may feel that these investors are usurping financiers. The enquiry into their personal and family wealth position, however, refuses this assumption. Their economic situation is just higher or equal to that of the financially disciplined fishermen.

TABLE 7.27. WEALTH POSITION OF COMMISSION AGENTS

More than	5	Crores	00.07%
	3 5		03.5%
	2 3		08.55%
	1 2		22.85%
	.5 - 1		64.55%
Less than	.5		00.48%

Source: Primary Data

TABLE 7.28. LAND HOLDINGS OF COMMISSION AGENTS

Having land	> 5	Acres	01.25%
	3 5		06.65%
	1 3		15.95%
	0.5 1		25.25%
	0.2 - 0.5		38.22%
	< 0.2		15.68%

Source: Primary Data

These middlemen are also equally dependent on fishing as the fishermen, who cannot find any secondary or alternative occupation. However, some of them are engaged in fishing allied occupations also.

TABLE 7.29. COMMISSION AGENTS HAVING INCOME FROM OTHER OCCUPATIONS

Fish processing	16.88%
Kerosene and stores supply	07.5%
Ice, utilities supply	02.25%
Money lending	08.22%
Transport operators	03.33%
Employment	02.45%
Trade, investments	02.35%
Others	07.45%
No other income	37.57%

Source: Primary Data

TABLE 7.30. SOCIAL, FINANCIAL & FAMILY STATUS OF COMMISSION AGENTS

1. Religion & Community of Commission agents	
Hindu Arayan	36.66%
Hindu Others	02.33%
Christian Latin Catholic	42.05%
Christian Others	08.5%
Muslims	10.46%
2. Traditional Occupation	
Fishermen	90.56%
Fish vendor	04.66%
Land lords	01.35%
Merchants	01.85%
Others	01.48%

3. Educational Level of Commission Agents

No formal schooling	06.65%
Primary Education	64.55%
High School Education	24.55%
College Education	08.25%

Source: Primary Data.

CHART 7.5. PERFORMANCE OF MATSYAFED

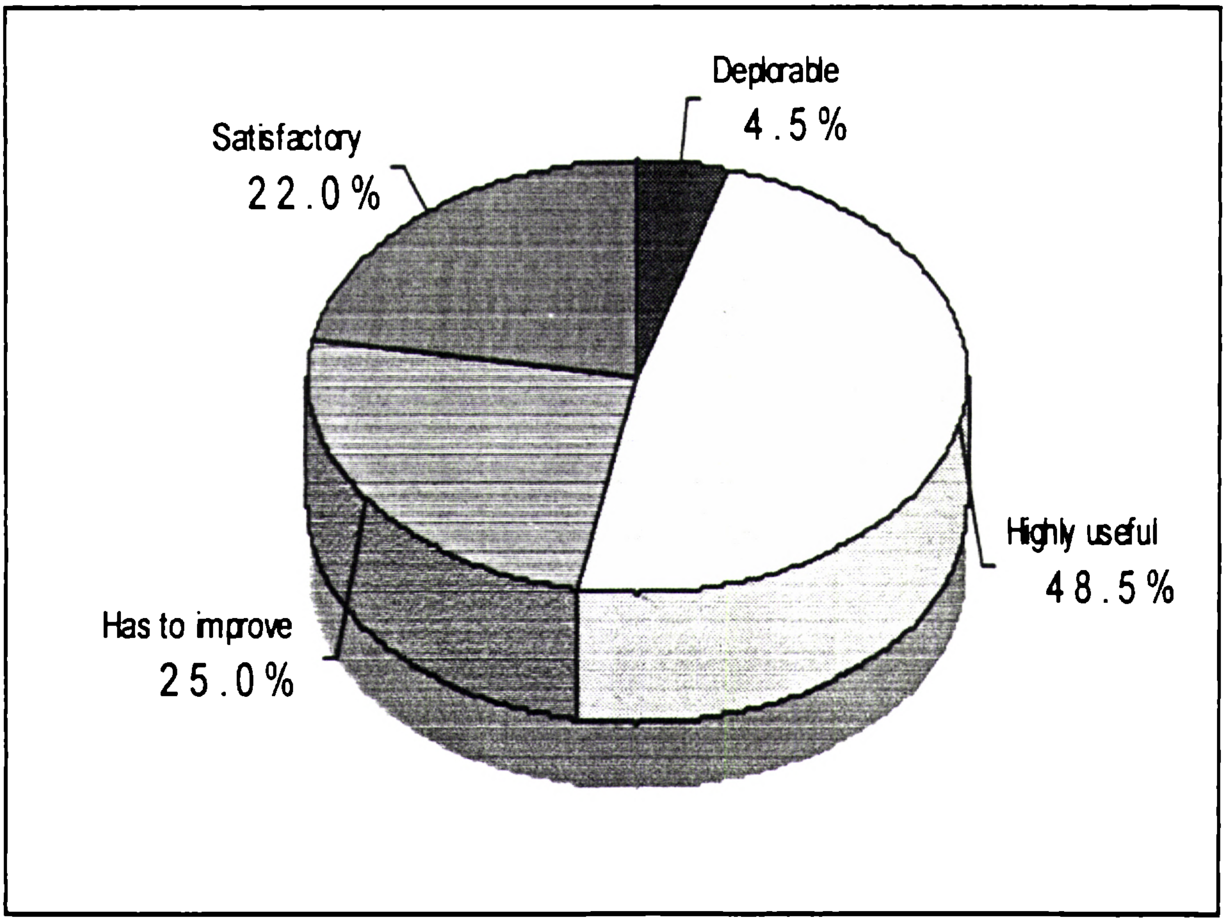


CHART 7.6. FISHERMEN CONSIDERING COMMISSION AGENT AS

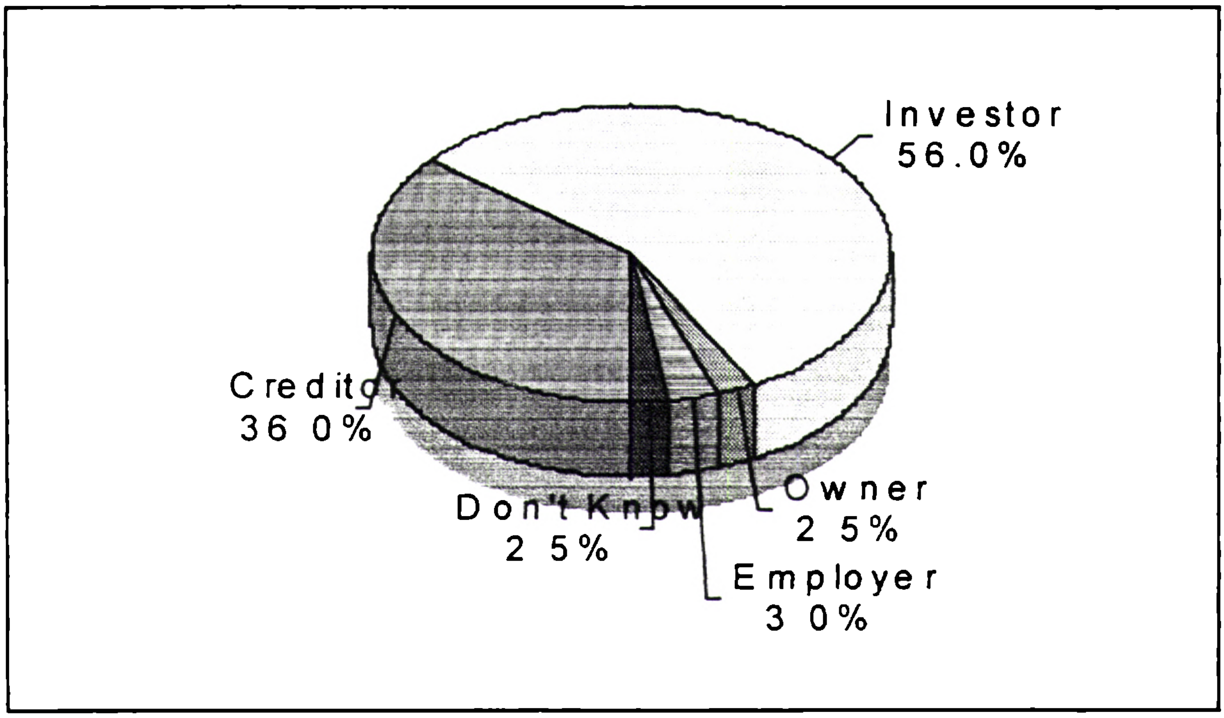


CHART 7.7. FINANCIAL ASSISTANCE BY COMMISSION AGENT IS THAT OF A

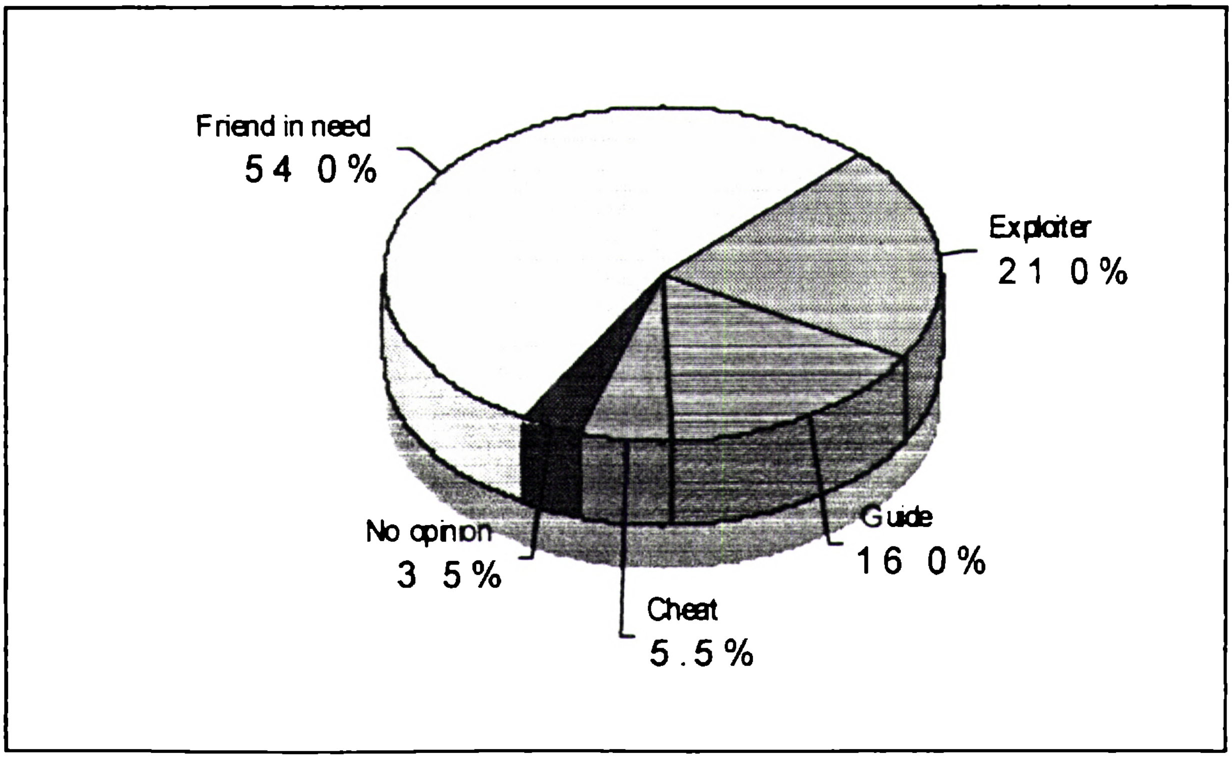
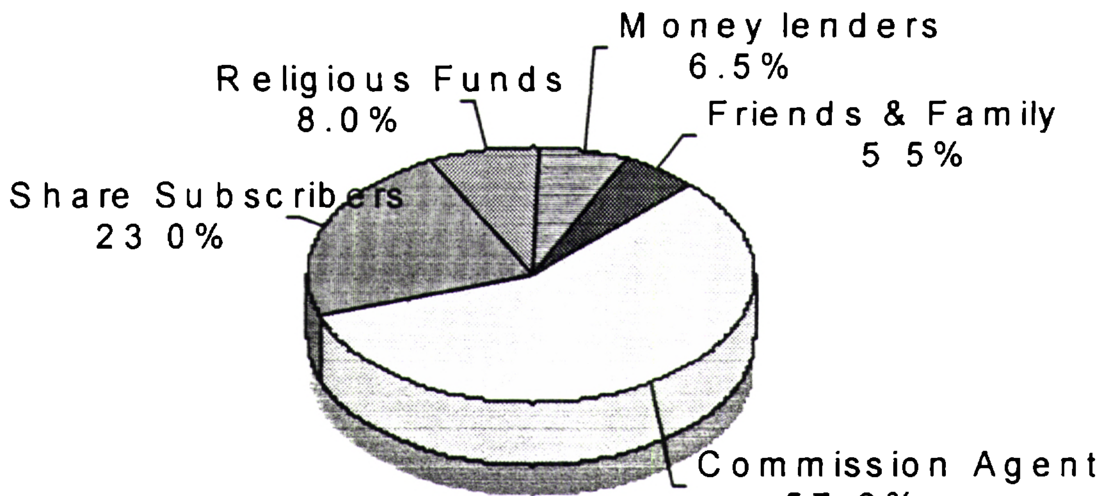


CHART 7.8. IN CASE OF EMERGENCY TAKE MONEY FROM



7.8.1. Summary observations During the discussions with the commission agents to bring out a proper delineation of their involvement, the following facts were reveled:

7.8.1.1. In the traditional marine fisheries sector, commission agency business was started during the feudal craft ownership period. The function of the earlier commission agents were that of managers (Karyasthan) for the craft owner, who had many other assets also like estates, coir retting, fish export etc. Later, due to problems involved in accounting of fish landings, the land lords, handed over the crafts to these tharakans, in return of a fixed rent called 'pattam'. The tharakans were to auction the produce and take the proceeds after paying for the labour. During the liberal craft ownership period, they took the responsibility of auction of fish and collection of the share due to the temple or church. It is after the motorisation that the agents started funding in large amounts, taking the form of investment as capital contribution.

7.8.1.2. To make the fishing units eligible for financial assistance from the organised financial houses and to reap the benefit of subsidies, they keep themselves out of the unit, evading their involvement and capital contributions. 54 percent of the sample fishing units were promoted by commission agents. They initially pool together the fishermen to form the group. It is the commission agent, who undertake all the functions relating to the fulfillment of the procedures and rules insisted by the bank or Matsyafed. This service was available to 72 percent units. They advance funds for remittance of margin money also. 44 percent of the units were catered by the commission agents with margin money for remittance in the bank. This, in turn, make the fishermen an owner member in the unit without advancing any money.

7.8.1.3. The commission agents are keen in pooling as much funds as possible from the institutional sources for enlargement and upgrading of the assets of the unit. Some of them has offered their personal property as collateral security.

7.8.1.4. The proposals for enhancement of efficiency of the unit by enlarging or updating of technology always comes from the side of commission agents. This would certainly bring more financial commitment from his side. They do agree that this practice virtually takes the form of sponsored debts. They maintain that any sort of backwardness in the assets of the unit will certainly demoralise the members and therefore they are forced to invest more and more money.

7.8.1.5. According to their experience funds available to the unit from banks, Matsyafed etc. are useful for procuring capital goods only. (The major chunk of the advance is in kind, like OBE, Net, Craft etc.). There are frequent and urgent requirements of money by the fishing units, both for short term and medium term for keeping the unit going. Such funds can be advanced only by an agency which has thorough knowledge of the specialities of the sector, liquid funds, and close contact. Commission agents claim that they are the sole agency with all these merits. Lack of working capital and the mismanagement of funds by leader of the groups are the two basic reasons for winding up of units, bringing huge loss to the financing houses.

7.8.1.6. In their opinion, most the development schemes framed by the organised sector are not beneficial to fishermen. Most of the investments made for enhancing infrastructure has rendered useless because of its super imposed nature. The authorities are always interested in building up structures, for which they always fail to have some project to run. Similar are the results of introduction of fibre glass crafts, fitted with inboard diesel engines, policies imposing restrictions in web size, ceiling the maximum power of OBEs etc.

7.8.1.7. In general, the performance of Matsyafed is found satisfactory. The officers and field staff of Matsyfed have successfully established a fair relationship with the fishing units. They are able to frame schemes which are beneficial to the fishermen. Due to inherent regulations and rules for observing procedures, they are unable to cater the urgent financial requirements of the groups.

Conclusion

The commission agents are playing a vital role in the day today life and occupation of traditional fishermen, by assisting and financing them to overcome any contingency. Their existence and continued assistance is inevitable for the subsistence and development of the class. The economic and social situation of the commission agents are almost equal to that of the fishermen. The majority of the commission agents and the fishermen consider the amounts provided by the commission agents as investments and not as debts.

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CHAPTER 8

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the important findings of the study and the major conclusions and makes some recommendations based on the insights given by the study, with a view to promoting sustainable development of the traditional marine fisheries sector and improving of the socioeconomic conditions of the traditional fishermen.

8.1. Findings

This section lists the important findings of the research with reference to the research problem and objectives set out in Chapter 1. The numbers in the brackets refer to the corresponding paragraphs of the thesis which substantiate the points.

8.1.1. The analysis of the role of commission agents in the traditional marine fisheries sector has brought out the following facts.

1) The real relationship of the commission agents with the fishing units is that of investors and not of creditors. They claim themselves as creditors, because, under the rules of Matsyafed and banks, financial assistance is limited only to fishermen groups and not proprietary fishing units. (5.2.2.1.1, 7.8.1.2, Table 7.24)
2) The role of commission agents has been constructive to the growth of traditional fisheries sector of Kerala. The commission agents are primarily responsible for almost all the technological developments effected so far and for the subsistence of the traditional fishermen. (6.11, 7.8.1.5,Tables 7.22, 7.23)

8.1.2. The main findings of the study with reference to the second objective, i.e., the examination of the phases and stages of induction of new technologies, new relations, in order to evaluate the contribution of commission agents in it, are the following.

1) The sector has achieved satisfactory growth by procuring income earning assets,

since motorisation of fishing, by utilising all the available credit sources. The fishermen are using advanced gears and engines for fishing on traditional crafts. This has been a strategy for survival, which is the outcome of their competition with the modern mechanised sector. (4.5.2.7, Tables 4.14, 4.17)

2) Traditional fishing groups have adopted an organisation of collective ownership and income sharing. Relations based on proprietorship and wages are absent. This was encouraged and facilitated by the commission agents. (4.5.2.7.5, 7.8.1.2., 7.7)
3) The commission agents are the most dynamic agency who are concerned about the economic efficiency and better performance of the fishing units and they are responsible for the induction of new technologies and organisational relations. (Tables 7.22, 7.23). They played a dynamic role in the diffusion of information regarding technological developments among the fishermen and in facilitating, by financing, the absorption of modern technologies. (6.11.3., 7.8.1.4., Table 7.17)

8.1.3. The efforts to identify the respective share and magnitude of investment by organised and unorganised financing agencies in traditional fisheries sector, for modernisation and reequipping, (the third objective) reveal the following facts.

1) The commission agents are the most preferred source of funds by the fishing units. Matsyafed, the apex cooperative organisation, specifically formed to finance the development of the fisheries sector and to save the fishermen from usurping practices of commission agents, stands only second. Because of nonsuitability of terms and conditions, policy and procedural regulations etc., financial assistance from commercial banks, Primary Cooperative Agricultural and Rural Development PCARD banks and other organised financing agencies are unpopular. The largest share in investment in the sector belongs to Matsyafed. (5.2.1.2.3, Table 7.16, 7.18 Chart 7.8)

2) The organised sectors have catered only to the fixed capital requirements of

the fishing units; while the current and urgent credit needs are provided by indigenous sources, i.e., mainly the commission agents. (7.5.1.13, 7.8.1.5., Table 7.14, Chart 7.8)

3) Loans ranging from hundreds to lakhs of Rupees are being provided by these agents to the fishermen with minimum formalities and without delay, which are highly essential and useful for the continued fishing operations and household needs. (5.2.2.1.3, 6.1.2.4., 7.8.1.2., Table 5.11, Chart 7.8)
4) The commission agents effectively and duly honour almost all credit needs of the fishermen, and therefore, the prime credit for the growth of the sector goes to them. (5.2.2.1.3, 7.12, Tables 5.11, 7.23)
5) The major share in the capital investment of fishing units belongs to commission agents. (Table 7.18)

8.1.4. The analysis of the composition of the investment structure and the evaluation of the nature and effects of indebtedness (objective 4) has exposed the following facts.

1) The debts provided by commission agents are sponsored debts; i.e., theyare contracted in the interests of the creditor. Such sponsorship and the competition between the agents have resulted in the acclimatisation of debts in to capital contribution. (5.2.2.1.5, 7.8.1.2., Table 7.23)
2) The fishing groups do not consider financial assistance from commission agent a debt. Instead, his investment is taken as a contribution towards the capital of the fishing group and his commission a share of income spared as return for his investment. (5.2.2.1.3., 7.8.1.2., Table 7.24, Chart 7.6)
3) Investments by Government and organised financial houses were not helpful enough to increase the income earning capacity of the fishing groups. Instead, the fishermen were trapped in the clutches of debts leading to loss of collateral securities offered. (5.2.1, 5.2.1.2.3, 7.5.1.13, 7.8.1.6.)

4) The performance of Matsyafed as financier for development has been creative.

Despite failure of many schemes, the federation has been successful in understanding the special nature of the financial requirements of the sector and making suitable rules. However, bound by the specific policies and rules, it is not able to quickly respond to the needs of the fishermen. This makes the role of the commission agents preferable or inevitable in a number of situations. (5.2.1.1.6, 7.8.1.7., Chart 7.4)

8.1.5. The following are the conclusions that emerged from the examination of the affiliation and economic and social status of commission agents in the traditional marine fisheries sector (objective 5).

1) Contrary to the depiction of the commission agent as an usurious investor, or parasite taking away their gains, the fishermen regard him as a friend in need, advisor, manager, and guide. (Chart 7.7)
2) Almost all the commission agents are from among the fishermen community. (7.8.1.1., Table 7.30)
3) The financial and wealth position of the commission agents are either equal to or just higher than the fishermen, which is the result of their financial discipline. (5.2.2.1.2, Tables 7.27, 7.28)
4) Majority of the commission agents are also engaged in other occupations like fish processing and allied trades, though their primary source of income is financing fishermen. (5.2.2.1.2., Table 7.29)

8.1.6. The exploration of the fish marketing system has revealed the following facts.

1) A group of intermediaries are making huge gains in the marketing of fish. Malpractices and cheatings are also common by these middlemen on the beach, taking an undue share of the small revenue of the fishing units. (6.9)

2) Fish marketing is dominated by private traders, who corner a huge portion of

the price spread. As supply forms the major determinant of price, there is a competition to reap the benefit of the stable demand by all constituents in the market, to place their product first. (6.10)

3) The commission agents either offer credit or guarantee credit not only to the fishermen but also to the traders and this help to make the fish marketing efficient. (6.7.4)

8.1.7. The important findings of the evaluation of the results of the programmes implemented by government and other agencies to eleminate market intermediaries (objective 7) are as follows.

1) Matsyafed, the apex organisation of fishermen welfare and development cooperative societies, tried to relieve the fishermen from exploitations through empowering of village cooperatives. However, the commission agents continued to be very important partner and facilitator of the development of marine fisheries sector and an unfailing source of support for the personal and occupational needs of the fishermen. (5.2.1.1.6)
2) Urgent requirements of money is a usual feature in the management of fishing units and such requirements could be catered only through a flexible credit system. Commission agency has proved to be the most suitable source of such quick funds. Thus, the units were forced to ask money from the official auctioneers also, who were appointed by the Matsyafed to substitute the market intermediaries. These auctioneers, therefore, were forced either to advance funds of their own or to give way to professional commission agents. (5.1.1, 5.2.1.1.3, 5.2.2.1.6., Chart 7.8)

8.1.8. The investigation as to whether the intermediaries are responsible for the poor performance in repayment of loans provided by organised money market (objective 8) has revealed the following.

1) The earnings of the commission agents are high, but the risk involved and the

effort undertaken are also high. (5.2.2.1.3, Table 5.8)

2) There are exceptions among the commission agents, who treat their advance as loans and are regularly appropriating repayments from the gross revenue of the groups, over and above the high rate of commission charged on sales. (5.2.2.1.5)

3) The major portion of the gross income of fishermen is taken away by fuel expenses for running the Out Board Engines, which is the foremost reason for contracting debts from the indigenous sources and failure in repaying debts from institutional sources. (7.6.2.2, Table 7.21)

4) The cost of spare parts is very high. The inability to meet the cost of repair is a major reason for the abandonment of units by the groups. For getting the Out Board Engines serviced, units are forced to take loan from share subscribers, money lenders etc. (4.6.3.3., 5.2.2.2, Table 5.2)

5) The unhealthy competition to enhance speed, hullage and enlargement of craft and gear has resulted in heavy investments, which were not checked by the Fisheries Department or the Matsyafed. Even innovations like use of OBEs, Ring-Scine nets, Mini-Trawlers etc. were not consulted with experts to forecast the effects of these implements on fish reproduction, ecology etc. The Government officials are not aware of the existence of a break-even capacity that is essential to trap individual species. In total, the Government policies and development plans were not effective enough and were fiasco. (4.5.2.7, 4.5.2.9., 4.6.3, 4.6.3.1, 7.8.1.6)

6) The rural development schemes implemented through the financial institutions were not good enough to cater to the needs of this section of the society and the schemes were failures causing much loss to the country and the economy. The segment is not regarded a proper area for investment by the commercial banks primarily because of non suitability of business terms. (5.2.1.2.2., 5.2.1.2.3., 7.8.1.6., 7.8.1.7., Tables 5.6, 5.7) These shortcomings and failures further justify, and even make inevitable, the role played by the commission agents.

8.1.9. The enquiry to assess whether the intermediaries are responsible for the poor performance in repayment of loans provided by organised money market revealed the following facts.

1) The working time and formalities of banks are not convenient and appropriate to the fishermen. Lack of knowledge of the terms and conditions, inertia to the formal style of dealings etc. lead to reluctance in timely repayment of loan amount. This results in lapses in regularity of repayments leading to overdues and levying of penal interest. This in turn makes the fishermen frustrated. (5.2.1.2.3., Table 7.16)
2) Neither the advances made to the fishermen, nor the commission charged on sales by the commission agents have any impact on the repayment of loans by the fishing units. On the other hand there are instances of persuasions and giving of monetary assistance to the units by the commission agents to repay loan installments in time. There are commission agents, who have provided collateral of property owned by them, for loans taken by the fishing units from banks. However, in stray cases, the fishermen agree that they defaulted repayment on advice of commission agents, which were made in expectation of writing off of debts by the government. (6.12.4., 7.8.2., Table 7.16)

8.1.10. Other findings

1) The economic performance of different craft gear combinations are almost the same. However, non-motorised units and the recently introduced inboard crafts offer comparatively higher rates of return and lower element of risk. In other words, the motorisation of traditional crafts by using OBEs is not economically feasible. (4.6.1.1.9., 7.19)

2) The commission agents mainly depend their own funds for investing in commission agency. Institutional and indigenous sources of credit are also used by them. (Table 7.26)

8.2. Conclusions

1) Financing primary sectors on mortgage of produce has been very popular in India, which is the customary practice of commission agents. The anglo banking system and the civil laws enacted by the British regime to protect their business interests went against these indigenous agencies. The government of independent India followed the European attitude and regarded indigenous bankers and commission agents hostile. Despite the propaganda against the commission agents and the efforts of the authorities to substitute them, the system is prevalent in many sectors. In traditional fisheries sector, its coverage is so vast that there are hardly any craft without the involvement of this middleman.
2) The traditional fishing equipments are mostly owned and operated by fishing units, formed by fishermen. This is the outcome of the rules and policies of Matsyafed, commercial banks and other agencies of the organised financing sector. The relationship between the fishermen and the commission agents in traditional fisheries is the result of a 'cooperative conflict', and has become an inevitable factor today.
3) The investments by the commission agents in the sector has taken the form of capital contribution and they are actively involved in the management and development of the sector.
4) The dual role played by the commission agents in traditional fisheries, that of financier and market intermediary, though has been subjected to several criticisms, is creative, essential and need recognition.

8.3. Recommendations

1) As the Government policies sidelining market intermediaries have been detrimental to the growth and subsistence of the traditional marine fisheries, an urgent review of the policy is essential.
2) The Government may make rules to regulate, recognise and license the commission agents and take them in to confidence, implement the schemes with their assistance, so that the programmes for modernising the sector

and for developing the financial conditions of the fishermen are successfully implemented.

3) Since the exact position of commission agent is that of the investor and his deposit forms the major part of the owned capital of the unit, loans to the fishing units may be given by commercial banks, considering the commission agent also as one among the group. This would ensure prompt repayment, effective use and offer ample security and liquidity for the loan.

4) The operations of the MATSYAFED may be rationalised by enrolling the intermediaries also as members of fishermen cooperatives, so that, these intermediaries can play a pivotal role in the management of fishing units assisted by Matsyafed. This would ensure desired utilisation of funds, prompt repayment and would avoid the losses due to bad debts. The Commission agent himself can be entrusted the responsibility of cash management of the units assisted.

5) Commission agency, similar to that of traditional fisheries, can be suggested for many traditional productive sectors, where, the agent could effectively find regular market, procure reasonable price and assure continuity of production. The financing and supervising tasks also can be entrusted to them leading to assured rural development and full employment.

6) The operating cost of units and the ill effects of the sound pollution caused can be reduced by switching the motorisation technology from Out Board Engines to Inboard Engines. The economic success of crafts fitted with inboard engines and the non-motorised crafts supports this finding.

7. In order to make the fish marketing economic, organised and scientific and to make the processing hygienic under the specifications of the ISO standards, it is suggested to establish as many mini and micro fishing harbours as feasible with modern cold storages, processing and freezing facilities etc.. This would curb the elasticity in price of fish landings and a minimum support price can also be offered to fish to solve the economic losses of fishing units. These harbours are essential precondition for switching

over to the motorisation technology from Out Board Engines to Inboard Engines. Further, this would improve the socioeconomic life of traditional fishermen, as the beach landing crafts are substituted by inboard engine crafts, which would permit them to give up the crowded inhabitation in the coastal hutments to protect the craft and gear. As a result, the cost of construction of the sea walls all along the beach to protect the fishing villages could be saved. This would further save the ecology and environment. For the effective execution of the provisions of The Coastal Regulatory Zone Act, this policy change is indispensable.

8.4. Scope for further Studies

The following are some of the areas that are yet to be explored relating to this topic.

1. Impact of the policies of MATSYAFED in the development of traditional marine fisheries.

2. Role of Commission agency in mechanised marine fisheries.

3. Economic results of motorisation by using OBEs in contrast with of those using IBEs.

4. Exploration in to other areas having collective ownership with proprietary capital.

5. Evaluation of government development policies in the development of traditional marine fisheries.

6. Cost benefit study of fisheries research and development agencies and their performance appraisal.

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Annexure No.1
Schedule for Fishing Units

Date	Place	Name of Craft
Name of Leader		Age
Education	Religion	Caste

Co-Owners	Education	Age Group	Capital Brought in	
Original	Primary	- 20		1000
Present	Secondary	20 - 30	1000	3000
Active	Higher	30 - 40	3000	5000
New members	Technical	40 50	5000	7500
Donor	Others	50 - 60	7500	10000
Others		60 - above	10000	above

Land held	House	Wealth	Savings	Debts
less than 5cents	Hut	50,000	Nil	Nil
5 - 10	Semi Per.	0.5 - 1.00	10000	10000
10 15	Permanent	1.00 2.00	0.1 .25	.1 .25
15 25	Tiled	2.00 5.00	.25 .5	.25 -.5
25 and above	Concrete	5.00 10.00	.5 1.00	.5 -1.00

Fishing Equipment

Type of Craft	Size	Hullage	in use for	Cost	Present Value
1.					
2.					
3.					

Gear Type	Size in Kg.	Length	in use for	Cost	Present Value
1.					
2.					
3.					

OBEs Used	HP	in use for	Cost	Present Value	Bought from
1.					
2.					
3.					
4.					
5.					

Other Equipment	Make	Capacity	Cost	in use for	Present Value
Fish Finder					
Echo Sounder					
Cell Phone					
Weinch					
Other					

Other information on Assets

Capital Structure

Owned Funds

Loan From Banks	Amount	Purpose	Branch	Interest	Balance
PCARDB					
Matsyafed					
Other					
Borrowings from					
Money lenders					
Religious Funds					
Share Subscribers					
Family & Friends					
Others					
Advance by					
Commission Agent					
Members					
Other					

Working Capital Borrowings

	Source	Amount	Purpose	Period	Interest	Balance
Craft related						
Gear Related						
OBE related						
Fuel expenses						
Others						

Other debts

Average Income

Which is the most preferred source for funds

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

Which is the most cheapest loan

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

Which is the simplest

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

Which is the most flexible

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

Which involves maximum risk

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

Which has the maximum formalities

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

In case of emergency, would take money from

Commercial Bank	PCARDB	Matsyafed	Chitty
Commission Agent	Share subscribers	Moneylenders	Family & Friends

You consider Commission Agent as

Owner Creditor Investor Employer Don't Know

Assistance of Commission Agent is that of a

Exploiter Guide Cheat Friend in need No opinion

Performance of Matsyafed

Satisfactory Highly useful Has to improve Deplorable

Performance of Commission Agent

Satisfactory Highly useful Has to improve Deplorable

Other opinions and observations

on craft

on gear

on OBEs

on price

on trawling

on inboard engines

on technologies

on Government policies

on Kerosene & Fuel

on infrastructure

on micro/mini harbours

other

Annexure No.2
Schedule for Commission Agents

Date	Place	Name of Craft
Name		Age
Education	Religion	Caste

Land held	House	Wealth	Savings	Debts
less than 5cents	Hut	50,000	Nil	Nil
5 - 10	Semi Per.	0.5 - 1.00	10000	10000
10 - 15	Permanent	1.00 - 2.00	0.1 .25	.1 .25
15 - 25	Tiled	2.00 - 5.00	.25 - .5	.25 -.5
25 and above	Concrete	5.00 - 10.00	.5 - 1.00	.5 -1.00

Fishing Units financed
Type of Craft Amount

Thangu vala
Chooda vala
Neettu vala
Fibre Glass
MiniTrawler
Nonmotorised
Others

Financed in Kind / for purpose

Advance for
Craft
Gear
OBE
Others
Composite
Commission charged
Interest Charged
Share claimed

Are you used to
Advance only for specific purpose
Advance money for working capital
Advance money for medium term needs
Appropriate amounts towards advance from sales proceeds
Appropriate amounts advanced for daily expenses
Appropriate amounts towards personal debts
Promote new units
Assist units to take loan from Banks
Assist units to take loan from PCARDB
Assist units to take loan from Matsyafed

Would you finance for
Fish Finder
Echo Sounder
Cell Phone
Weinch
Other

Which loan you would suggest the fishing group
Loan From Banks
PCARDB
Matsyafed
Money lenders
Religious Funds
Share Subscribers
Family & Friends
Others
Advance by
Members
Other

Which is the most preferred source for funds by you
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

Which is the most cheapest loan
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

Which is the simplest
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

Which is the most flexible
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

Which involves maximum risk
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

Which has the maximum formalities
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

In case of emergency, would take money from
Commercial Bank PCARDB Matsyafed Chitty
Moneylenders Family & Friends

You consider yourself as

Owner	Creditor	Investor	Employer	Don't Know

Other opinions and observations

on craft

on gear

on OBEs

on price

on trawling

on inboard engines

on technologies

on Government policies

on Kerosene & Fuel

on infrastructure

on micro/mini harbours

other