United Nations Team for
Tsunami Recovery Support

Food and Agriculture Organization
of the United Nations

Enhancing Financial Services Flow to Small Scale Marine Fisheries Sector

A Study for FAO/UNTRS

By
Ramesh S Arunachalam, Kurian Katticaren
V. Swarup and **Kalpana Iyer**

Micro-Finance
Consulting Group (MCG)

Enhancing Financial Services Flow to Small Scale Marine Fisheries Sector

A Study for FAO/UNTRS

By

Ramesh S Arunachalam,
Kurian Katticaren,
V. Swarup and **Kalpana Iyer**

Citation

Arunachalam, Ramesh.S, Kurian Katticaren, V. Swarup and Kalpana Iyer, (2008)
Enhancing Financial Services Flow to Small Scale Marine Fisheries Sector.
Chennai: United Nations team for Tsunami Recovery Support, UN India.

United Nations team for Tsunami Recovery Support (UNTRS)
Apex Towers, 4th floor, 54, 2nd Main Road,
R.A. Puram, Chennai-600028, India
Tel:91-44-42303551
www.un.org.in/untrs
(valid for the project period only)

The United Nations, India
55 Lodi Estate,
New Delhi-110003, India
Tel: 91-11-46532262, 46532333
www.un.org.in

Food and Agriculture Organization of the United Nations,
Office of the FAO Representative in India & Bhutan
P.O.Box No 3088, 55, Lodi Estate
New Delhi-110003, India
Tel:91-11-24628877
www.fao.org

Micro Finance Consulting Group
240-A, Lloyds Road (Besant Road)
Gopalapuram, Chennai 600086
Tamil Nadu, India
Email: r_arunachalam@hotmail.com

Context of the study

The United Nations Team for Tsunami Recovery Support (UNTRS) in Chennai is facilitating the process of Tsunami recovery support through specific interventions.

The Food and Agriculture Organization of United Nations (FAO) as part of the UNTRS focuses on Fisheries livelihoods areas. FAO is promoting efforts to set clear directions in addressing the un-addressed issues that are important to ensure sustainable fishery based livelihoods with a pro-poor focus.

One of the major gap identified in enhancing the livelihoods of the coastal fishers has been the unsustainable financial services available to them. The credit access and credit worthiness of fisherfolk had always been a question. So to address sustainable livelihoods of fisherfolk, the basic bottlenecks in this sector need to be identified and addressed. This study has been commissioned for this purpose.

We also take this opportunity to thank the study team for the experienced hard work, Mr.Pieter Bult, UN coordinator (UNTRS), the whole UNTRS team, Dr. Daniel Gustafson, FAO India representative, FAO fisheries experts of Rome and Bangkok, UNDP, UNFIP and DFID for all the support and cooperation. We are grateful to all the Government officers, NGO and INGO representatives, Banking institutions, experts and fisherfolk representative who had directly or indirectly contributed to the study.

We are specially thankful to all the participants of the workshop held at Chennai on 23rd and 24th April 2007 on the study and for all the valuable feed back to improve and make use of the study. We specially thank Ms. Leena Nair, IAS, Secretary, Animal Husbandary, Dairying & Fisheries and Mr. S. Vijayakumar, IAS, Director of Fisheries, Tamil Nadu for all support given.

C.M. Muralidharan
Fisheries Livelihoods Coordinator (FAO)
United Nations Team for Recovery Support (UNTRS)
Chennai

Foreword

December 26th, 2004 will remain a black lettered day in the history of humankind. The havoc and devastation unleashed by the giant Tsunami waves along the coastlines of Asia shall remain etched in memory for all time to come. Destruction and loss of such epochal proportions required rehabilitation measures of massive proportions. It required concerted and joint efforts of governments, multilateral and bi-lateral agencies and humanitarian aid organizations to redress the horrifying human situations that the tragedy left behind. Loss of life and livelihood, destitute families, orphaned children, and the need for immediate as also long term medical support systems were merely a few of the consequences that stared planners and executors of the rehabilitation measures alike.

More than three years down the line, several projects have been designed and implemented to support the victims and survivors of the Tsunami in their recovery process. The efforts of the United Nations Team for Tsunami Recovery Support (UNTRS) in Chennai are among those interventions geared to facilitate this recovery process with specific focus on sustainable development and mitigation. Hence sustainable fisheries livelihoods is one of the important area being addressed.

Accordingly, The Food and Agriculture Organization of United Nations (FAO), as part of the UNTRS, commissioned a study to study the major hardships and problems suffered by the fishers in their efforts to enhance their access to finance and livelihoods. The scope of this study has been to identify and study the inherent problems in the sector that have hindered the credit worthiness and the credit access of the fishers as also delivery of other risk mitigation and livelihood financial services to them.

The study done by Microfinance Consulting Group has rigorously and comprehensively analyzed the situation and taken into consideration both data collected directly from the field as also secondary information in its analysis of the situation and the recommendations that it makes. It offers a number of pragmatic recommendations and solutions that should be useful for policy makers, producer organizations and other stakeholders involved in promoting and sustaining a viable fisheries sector

I would strongly encourage various stakeholders and policy makers to study these recommendations and translate these into action at the field level so that a wide range of need based financial services can be delivered to enable fishers to build sustainable livelihoods.

Pieter Bult
Deputy Country Director
UNDP India
(Formerly UN Coordinator for UN team
for Tsunami Recovery Support, Chennai)

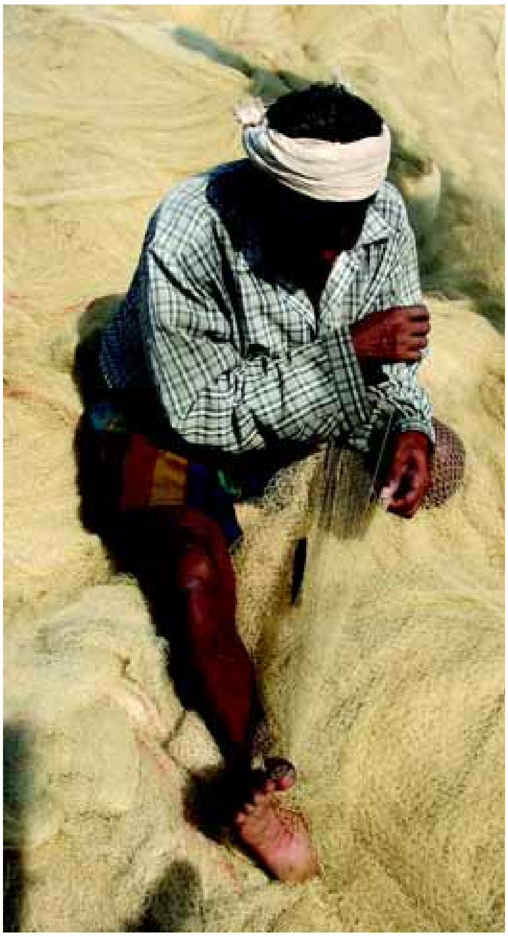


TABLE OF CONTENTS

LIST OF ANNEXURES

LIST OF TABLES

LIST OF FIGURES

LIST OF BOXES

Acronyms and Abbreviations

ATMs	Auto Teller Machines
BR Act	Banking Regulation Act
BCA Act	Banking Companies Acquisition Act
CMFRI	Central Marine Fisheries Research Institute (India)
CIFT	Central Institute of Fisheries Technology
CBDT	Central Board of Direct Taxes
CII	Confederation of Indian Industry
CRISIL	Credit Rating Investment Services India Limited
CRIGs	Community Rural Insurance Groups
CDF	Cooperative Development Foundation
CSR	Corporate Social Responsibilities
DFID	Department for International Development
FAO	Food and Agriculture Organization of the United Nations
FGD	Focus Group Discussions
FCRA	Foreign Contribution Regulation Act
FICF	Fisheries Innovation Challenge Fund
FLDG	First Loss Default Guarantee
GoI	Government of India
GCC	Girijan Cooperative Corporation
GIC	General Insurance Corporation
HUDCO	Housing and Urban Development Corporation
HDFC	Housing Development Finance Corporation
HACCP	Hazard Analysis and Critical Control Point
ICNW	Indian Co-operative Network for Women
IRDA	Insurance Regulatory Development Authority
IDBI	Industrial Development Bank of India
ICICI	Industrial Credit and Investment Corporation of India
IFAD	International Fund for Agriculture Development
JLG	Joint Liability Groups
LABs	Local Area Banks
LIC	Life Insurance Corporation
MIS	Management Information System
MFIs	Microfinance Institutions
MPEDA	Marine Products Export Development Authority (India)
MACs	Mutually Aided Cooperative Thrift Societies
MoF	Ministry of Finance
MNC	Multinational Corporation
NABARD	National Bank for Agriculture and Rural Development
NBFCs	Non-Banking Financial Companies
NCDC	National Cooperative Development Corporation
OTRR	On-Time Repayment Rate
PRAs	Participatory Rural Appraisal
POs	Producer Organisations
PAR	Portfolio at Risk
RBI	The Reserve Bank of India
RRBs	Regional Rural Banks
RFIs	Rural Finance Institutions
SIFFS	South Indian Federation of Fishermen Societies
SHGs	Self-Help Groups
SMEs	Small Scale Micro Enterprises
SLBC	State Level Bankers' Committee
SEBs	State Electricity Boards
SIDBI	Small Industries Development Bank of India
SGs	Solidarity Groups
SSE	Small Scale Enterprises
UNTRS	United Nations Team for Tsunami Recovery Support
WWF	Working Women's Forum

Executive Summary

1. Marine fisheries have progressively increased by nearly six times during the past 55 years and major fish production comes from the coastal resources. About 0.933 million people are said to be employed in the marine fisheries on a full-time basis, 1.01 million on a part-time basis and 1.39 million are engaged in other ancillary activities." Yet, ironically, the lives and livelihoods of the low income fisherfolk, who contribute so much to the national economy, is still a story of braving various uncertainties, risks, vulnerability and hardships. The stagnation of fish production inshore waters combined with increased competitive effort, has affected profitability of small scale fishers. Inadequate facilities and linkages to maximize profit from the available catches has added to the problem. Poor financial services to the fishers and exploitative nature of existing financial sources make the fishers financially insecure and heavily indebted.

2. In the given background the present study is to understand the financial services sector with regard to low-income fisherfolk, especially, in a comparative analysis framework in the post tsunami context, with the following objectives:
   - To understand the extent to which men and women in fisheries are excluded from the mainstream financial system
   - To identify their various needs for financial services across pre-harvest, harvest and post harvest fisheries
   - To understand supply side perceptions and constraints
   - To propose practical measures and recommendations by which a wide range of financial services can be delivered to low income fisherfolk, and
   - To explore the above, in the Tsunami affected contexts of Tamilnadu and Kerala

3. The study was conducted in (and primary data[1] collected from) 10 Districts across 3 states - Chennai, Chengai MGR, Pondicherry/Cuddalore, Nagapattinam, Tanjore, Ramnad, Tuticorin, Kanyakumari, Trivandrum and Kollam. Secondary data analysis using the internet and other relevant material was also done. Special analysis was done using MIS data of SIFFS/ICNW with data from several years and several thousand clients[2].

4. In India, the history of fisheries credit is closely linked with rural credit, poverty alleviation and micro-finance. The finance system that exists for low income fishers today is a complex financial one involving many stakeholders - from NGOs, NGO-MFIs, Cooperatives, Producer Organisations (like SIFFS), MFIs, NBFC(s), Commercial Banks (Public and Private Sector), RRBs, Cooperative Banks, DFIs and others. These institutions are governed by multiple laws, the regulations varying, from very passive (for some types of entities) to very active (for others). In fact, some of these laws and hence regulatory/supervisory mechanisms, even have the potential to work at cross-purposes and the potential for conflict of interest also exists.

5. A combination of variability in catch, technology upgrades, over capitalisation, rising costs, aggressive fishing, over crowding, etc. have made economics of fishing and fishing related occupations uncertain. The overall output remains almost same but the investment and operational costs have gone up considerably. This has resulted in fishermen getting increasingly dependent on loans to finance their expenditures and also using loans as coping mechanisms. The key expenditures are: (a) *Capital expenditures*: which include purchase of boats, launches, nets and engines etc; (b) *Running expenses:* which include boat, net and engine repairs, ice fuel and food etc and (c) *Other Expenditures*: Medical, emergency and other expenditure for family including education.

[1] Individual interviews: A 21-page questionnaire, that took about 2 hours per respondent, was administered to 221 respondents (139 Men and 82 Women). The main areas are capture fisheries and vending, Stratified random sampling was used to select respondents for the study. The finalized questionnaire was administered[2] to about 221 respondents and nearly 95.93% of the total questionnaires were found to be valid and reliable. The respondents were members of SHGs, co operatives, producer organizations, other forms of low income-finance entities and non-institutional members and were spread over 3 states of India. Focus Group Discussions (FGD) and PRAs: 61 Men and Women Groups were chosen from across Tamil Nadu and Kerala. Each FGD lasted approximately 2.4-2.5 hours and had 9-14 participants per group. 23 of these FGDs also had PRA sessions. The FGDs focused on various aspects relating to financial needs and risks including life cycle events, set-backs and emergencies and associated expenditures, client feedback on financial products etc. Discussions: Detailed discussions were held with Bankers, Government Staff, Financial Institution Staff, Equity Companies, Insurance Companies, Exporters, etc; 36 Suppliers and 28 Intermediary/MFI Staff from across all levels participated in the study. Detailed discussions were also held with all four regulators and a panel of 19 Experts with an average of a decade of experience in their respective sectors. This panel included 7 experts from Fisheries and 12 from Micro-finance and Micro-enterprises sectors.

[2] Database spanned 12 years for SIFFS and since 1997 for ICNW

6. The issue of variability in catch is a major one. The multi year catch data analysed using the SIFFS database, clearly indicates the highly variable nature of capture fisheries. The study shows capture fisheries is a highly variable (income providing) livelihood. Viability of fish vending and marketing is affected by the risk of perishability, erratic supply of fish stock, lack of appropriate storage facilities and several other aspects including borrowings for emergencies at high cost and the like.

7. The Societies, SHGs, Thrift Co-operatives and MFIs have fixed maximum limit to the amount they would lend which varies across models and hardly exceeds Rs. 50,000. In the absence of institutional credit, the fish worker's only recourse (as a coping mechanism also) is mainly the informal credit system. The average reported indebtedness across geographies, craft types, activities was Rs.81,400 and highest debt outstanding was Rs. 2,45,000. The rate of interest charged, ranged from 24 to 190%

8. Data across all states indicate that small-scale fish workers cannot access formal institutional credit except through intermediary peoples organisations (SIFFS), state cooperatives (MATYSAFED), NGOs, MFIs (Dhan, ICNW, Sneha, Shanti Dhan, IASC etc) and SHGs. The lone exception seems to be gold loans for which the fishing community accesses banks/NBFCs quite easily and directly... People still rely on money lenders, financiers, chit funds, borrowings from friends and relatives for raising funds for life cycle needs, housing, education of children, setbacks and emergencies, etc. In many cases, even for production purposes, they have to rely on informal money markets including trader, merchant and money lenders. And for the poorest among these, even that appears to be getting difficult.

9. Fisherfolk actually save, but through mechanisms that we typically do not understand (for example gifts during social functions, etc). Most often, they give loans to friends/relatives for interest (12%-36%) or even without interest. This seems to depend on the amount required, exigency of circumstances, need, etc. 127 respondents said that they had borrowed from friends or other informal sources some time or other in their life. Very few people had independent bank savings accounts (19) and independent postal savings (22) that they actually operated and used. Some clients were also used to saving for the future by investing bulk amounts in special assets like land

10. Thus, while the need and potential to tap savings exists, the capacity and willingness to save appears to depend on the specific product and distribution mechanism, which must appeal to the fishers and be channeled through appropriate intermediaries.

11. To motivate fishers to save, the attitude to life on the hope of tomorrow being their day, has to addressed In fact, is repayment data of SIFFS (analyzed for this study) clearly shows that catch variability could result in a 36 month loan-after being overdue for 3rd and 4th month – being fully repaid in months 5/6. 12 year data over 6210 loans from SIFFS shows that many production loans are closed by 18 months, almost before 50% of the loan term is over. Hence, attitudinal issues need to be tackled for promoting savings.

12. Financial services such as mutual funds, small savings schemes (postal, Recurring or Fixed Deposits) are not yet very popular among fishers.

13. Despite the inroads made by LIC/GIC in providing insurance for the fisherfolk there is a strong negative perception with regard to insurance. This is especially because of past bad experiences with agents and fly-by-night operators. Rebating by LIC agents is also a major issue. Apart from the above, insurance in the fisheries sector, especially for assets, requires certain critical aspects like registration of boats, unique IDs for them etc- all of which requires regulatory attention.

14. Thus, as noted above, financial deepening is the need of the day. Of the range of unmet needs, the following appear to be critical: Education/Emergency loans, need for safe and liquid savings facilities, and insurance products for life cycle events, emergencies and setbacks. Health insurance is very critical as even one occurrence of a health problem often breaks an entire family's resilience. Many others were also keen on a retirement fund. The possibility to introduce a pension scheme is quite good in some areas; UTI Mutual Fund indeed has a product that can be adapted. Most importantly, it includes flexible contributions, which are very critical. Micro-leasing could also be explored for Coolies, with the option of buying the equipment at a later stage.

15. In Tuticorin, while the fishermen associated with the federation did not have any loans from the fish traders and their sale was through the local federation, still the credit dues from traders ran into several months of receivables. Even the federation has been unable to collect the funds from the traders and it was said that if they forced the trader to pay up, then they will be unable to sell in the local market. This

is the extent of trader control on local markets/fishermen. The question to ask here is, are traders using fisher's money (credit) as working capital?

16. *Other risks mentioned were: 1) Life at Risk (LAT)****:*** Since they have to venture into deeper sea, they often reach international waters where the risk to life is high; *2) Trawler Risk****:*** Another risk is from trawlers which sweep the sea beds using aggressive fishing methods *3) Equipment Loss Risk:* Also, trawlers damage nets of smaller crafts. Propellers of ships also damage nets and collisions damage boats, engines and cause accidents. 4) *Trader Risks:* Vendors, hawkers and traders brought up risk of damage, perishability, inability to sell, business loss due to inability to recover sale on credit, physical risk from police/govt and such issues.

17. The clients/groups were also probed about life cycle events, setbacks and emergencies. The major expenditures associated with these for the different households in the last 3 – 5 years were also gathered, including coping mechanisms.

18. It is interesting to note that the respondents placed greater emphasis on all events (marriages, functions, education and housing) other than education, which again shows the priority of the fisher community – although, this could also be because of the fact that education (generally) sets a family back much less than either housing, marriage and/or functions.

19. Likewise, in terms of setbacks and emergencies, it appears that potential exposure and risk impact on families is very high in case of loss of business assets and ill health followed by high for accident, death and fire (in case of urban slums). Impact because of rain, flood and cyclone may be high[3] but it appears that some relief is always available from the government and other stakeholders. While the above are data based on the survey, the PRA results offer some very interesting insights in terms of aspects that act as sources of financial pressure

20. The top three financial crisis factors recalled were loan repayments, sickness and loss in work. Other aspects that came up included alcoholism and school fees

21. The most dominant cooperative financial service model is the one developed by SIFFS. This integrated model has been developed, refined and standardised over 30 years. Matsyafed in Kerala has adopted the same model and very rapidly spread the same across the whole of Kerala state. The interesting fact is that Matsyafed "cooperatives" are the strongest where the SIFFS societies are also strong. A wide variety of choices and alternatives for the people has forced these organisations to perform well to attract and retain fishers as members. In Tamil Nadu the state cooperatives are present in several districts but they need significant attention for revival. SIFFS is now rapidly expanding into Tamil Nadu as are other Church-based organisations which are working in Kerala/Tamil Nadu.

22. The traditional Microfinance interventions, appear unsuitable for addressing the demands from fish harvesting activities. This is very important from perspective of financial inclusion of men in fisheries. Hence, traditional Microfinance approaches are perhaps more applicable to post harvest fishery with women. But here also the pure Microfinance logic will not be enough and it needs to be tailored to the fisheries context.

23. The larger and more complicated problems in post harvest fishery cannot be addressed simplistically just through credit financing of women, even as the economic/social divide between coolies and owners cannot be sorted out by collective crew ownership of fishing equipment!

24. State has great outreach and examples from many contexts tell us what good state interventions can do. But the state should ensure level playing grounds, mutual accountability, checks and balances and social audit of responses to sectoral responsibilities.

25. On the flip side, state interventions tend to monopolistic practices, using state power and resources to drive development in certain directions, without the willingness and the ability to equally address the negative externalities. Cheaper credit, loan waivers (!!!), indiscriminate subsidies on production loans have driven small scale fisheries in certain unintended and undesired directions – mainly in Kerala and also in Tamil Nadu.

---

[3] Tsunami was a freak event and certainly an outlier. This data is however available but the recall data is quite contradictory and so, has been excluded.

26. Fish vending is a stigmatized occupation and younger educated women an opting out of it. There are limited opportunities for broad basing and diversifying the economy and hence there is almost complete dependence on the fish resource base.

27. Implications of this are: poor risk spread, no proper response to variability/seasonality, and increasing unemployment, underemployment and concealed unemployment. These aspects are worse, post tsunami. While fishing businesses need ongoing investments to be sustainable – purchases and upkeep of boats, engines, nets - Post Tsunami, more fishermen seem to have been provided fibre boats/engines without assessing the earning potential. This has worsened the situation of over capitalization and lowering returns – though fishermen believe that catch has dropped post tsunami, it could be the result of too many boats with too much investments on them, operating in the same area and bringing back very little fish. Illustrative economics are given in the adjoining table from different geographic areas.

28. The main players in the small-scale fishing community are: Merchant Money Lenders, Owner-Workers, Owners and Coolies.

29. While the system of profit sharing varies from place to place, the most vulnerable are the coolie workers in any fishing community. They have hardly any access to formal institutional credit. In some societies of SIFFS, the crew can also save money and avail of smaller loans for consumption purposes during festivals. But in most societies, coolies have no participation in the activities and financial transactions of the society. But the hard fact is that they constitute >70% of the community and financing them is a CRITICAL NEED for the larger good of the sector.

30. The cleavage between merchant-money lender/craft owners on the one side and the coolies on the other side is likely to deepen into sullen resentment and/or irresponsible alcoholism. During post tsunami interventions, this sharp divide was very clear. The simplistic solution attempted to also make coolies into owners (group ownership!) has backfired.

31. Industrious and strong women continue to be the mainstay of fishing household. But due to loss of their economic control – total in the area of pre-harvesting net making and getting more and more serious in fish sales – they are losing their spaces in the families and in the public domain.

32. By and large, women are more educated than men and more girls retain themselves in school and even complete graduate/professional courses than boys do.

33. The fish vending operation is also stigmatised. Other than the older women and the very poor, no woman would go for fish vending. Intervening agencies need to address this question and upgrade fish procurement, processing, storage transport and sales of fresh and dry fish. There are also places for value-addition through processing and through tapping opportunities in the up markets.

34. Further, there are quite some enterprising women fish vendors using working capital as high as Rs.1 to 2 lakhs – such women need to be organised further and supported with credit, warehousing, transport and organisation of the market places (proper stalls, kiosks, sale by weight against fixed process, etc). Such women entrepreneurs can even provide jobs to large number of educated girls and boys and to other women. This aspect needs to be seriously and strongly explored.

35. Dowry is getting bigger and for a family with two or more girls, this is going to be a big burden. The family must educate the girl and then meet the dowry and marriage expenses and getting nothing back. Hence it is critical that the employability questions for these women is also addressed. Educated unemployed girls are also more likely to get married to fish workers who are less educated than them and perhaps will also have to pay a larger dowry.

36. In terms of the time spent by women on various activities, the survey suggests that women have started spending marginally more time on production and market activities but they still carry the burden of domestic work as well – that women share a great proportion of productive and household (including reproductive) work is evident from all places.

37. Few women, for whom share of production activities relative to the rest of the family had gone up, stated the following as primary reasons: male member(s) migrated, male member (s) died or set up new household, children have grown up, so they have more time, their cash earning opportunities increased, so they participated more in production activities, household became poorer and so they had to spend more time to production activities, Girl children help out and Others

38. There are several important reasons for the diversification of the economy of the fishing community. The community is over dependent on one single resource base. This resource base cannot be further exploited. There are too many competitors for the same resource. Hence pressure must be reduced by taking people off fishing. Diversification will also clear the space for regulatory interventions. Diversification is a key aspect for innovative financing in Fisheries and this aspect is taken care of while making the recommendations.

39. There were several rounds of discussions with supply side stakeholders and their perceptions of the fisheries sector are given below: (a) *Variability:* There is huge variability in catch across fishers/geographies, etc and here, the variable and cyclical income for fishermen was a major issue mentioned by bankers. (b) *Inability to Demonstrate Savings:* The fishermen are unable to generate cash savings. Traditionally they have been conditioned to spend all their earnings and rely on borrowings for any emergencies or additional expenditure. (c) *Seasonality***:** The fish stock moves from one place to another based on seasons. Hence the catch is dependent on the seasons. Generally a good season in one place is for 6 to 7 months and the remaining months are lean season. Thus, the cash flow varies based on that. Also, overall value of the catch is dependent on the type of fish catch. This is influenced by environmental changes within sea as well as on the coast. (d) *Perishability:* The fish catch is a highly perishable commodity. Very strong output linkages and storage facilities are a must for getting good price of the catch, as it is a highly perishable commodity. The savage value goes down quite quickly - with passage of time. (e) *General Risk***:** Fishing is generally a high-risk business. The life and the assets are at high risk during fishing. (f) *Fairly High Depreciation***:** Fairly high rate of depreciation applies to fishing equipments. Boats and other equipment depreciate quite fast and they need to be replaced within 3 – 5 years or 7 years at the maximum. (g) *High Investment Business***:** As the cost of fishing equipments is very high, it is also prohibitively costly to buy these equipments. The small fishermen generally work in groups where one person owns the equipments and remaining invest through labor. As per informal estimates per boat there are three to four small fishermen dependent on it. Ratio of owners to coolies is 1:4 or so and so, it is high investment with diminishing returns today due to over crowding and unsustainable practices. (h) *Migration***:** There has been a tendency for small fishermen to migrate to other areas in search of the better fish catch for longer periods of time. (i) *Continuous Technological Changes***:** The bigger fishermen (using trawlers) continuously invest in technological upgradation (GPS, improved nets and improved storage mechanisms) and hence get a better catch as compared to small fisherman using traditional methods and equipments. They generally go for deep-sea fishing by leveraging their technological strength and hence reducing the variability/ seasonality associated with the business. In some ways, the presence of these trawlers causes numerous hardships for the low income fisherfolk. (j) *Exclusive Livelihood***:** Most of the fishermen exclusively depend on fishing for their livelihoods. They generally do not have other supporting livelihood activities to fall back on during lean season or during any major calamity. This makes them more of a credit risk as also a very vulnerable group. (k) *Environmental Risk***:** Due to continuous degradation of environment, the fish catch is reducing along the coastline. This is evident from the increasing distance from the coast that the fishermen need to travel to catch fish. This increases the risk and also the overall expenses. Management of open access resources require careful attention; and (l) *High Input Cost***:** Fishing today has become cost intensive – output per unit of investment is rather low and same output can be got with lesser investment. However, subsidies by Govts is slowly increasing the investment in fishing – for example, subsidies for engines serve to incentivise fishers to go for high investment engines. Corrupt practices are also created by the subsidy component as in Small Scale Enterprises (SSE) sector – e.g., showing of some one else's engine for getting subsidy and also the same aspect in registration of boats, etc. The increasing intensive nature of fishing is also making it less attractive economically

40. Thus, fisheries is perceived as an extremely risky sector among bankers/suppliers/insurance companies. There is lack of sufficient specialized staff with requisite fisheries background in these suppliers and this makes the task of investment even more difficult. Views of suppliers have also been compiled in the graph below with the focus on relating individual components to the significance and level of risk

41. The fact that Fisheries and the associated sub-sectors contribute immensely to the GDP and the economy should be recognized. Special attention is required to the fisheries sub-sector because of its uniqueness including availability of unenforceable collateral, lack of collateral substitutes, uncertainty and volatility in fish production and vagaries of weather. The need for special financial products for fisherfolk, and requirement of alternative delivery mechanisms are imperative for the low income fisheries sector to survive, expand and become a growth area and also for sustaining livelihoods of low income fishers.

Infact, an analysis of the supply side data reveals that bankers/other suppliers have used these perceptions to guide their investment in/loans to the small scale fisheries sector.

42. The earlier mentioned perceptions have indeed had an impact in terms of lesser/lower formal financing being available for the fisheries sector. To summarise, as evident from the data on the priority sector, it is clear that suppliers have not directed much attention to fisheries, for the earlier mentioned reasons. The suppliers also mentioned several constraints in their operations

43. **Ensure Financial Viability in Harvest Fisheries:** Through strict enforcement of Regulation to restrict effort and support cost reduction and profit optimisation measures.

44. **Regulate Mechanised Sector and Enable Diversification:** To ensure viability of small scale fisheries, financial investment, particularly in the mechanised sector, should be positively directed to phase out and diversify. The financing of higher horsepower engines should also be discouraged through higher duties and tariffs, larger interest rates and generally, lesser availability of finance for the same.

45. **Remove Distortions in Financial Market: (a)** ***Subsidies*** **-** There are huge distortions in the financial markets which are imperfect – subsidies are available through certain channels whereas other channels do not have it, like in case of engines, where subsidies are available through Matsayafed alone. So, there is a need to create a level playing field by making subsidy available to individuals irrespective of organizational affiliations; more over certain subsidies which encourages over capitalisation should be discontinued (b) ***Supply side distortions:*** These distortions must also be addressed and e.g., National Cooperative Development Corporation (NCDC) must lend to all intermediaries and channels. There is a need to create guarantee interventions to enable producer groups and MFI type channels to access and leverage more funds from NCDC and other such organisations; and (c) ***Interest Subvention:*** The issue of level playing field also concerns private versus public sector banks. The interest subvention by Government of India, currently available only for public sector banks needs to be extended to private sector banks. Also, this interest subvention must be (specially) made available for fisheries as well, just as it is for agriculture.

46. **Revitalise State Run Financial Institutions and Make them Autonomous:** Governments should ensure autonomy of institutions that are involved in finance. The existing cooperatives in Tamil Nadu at the village level need to be better capacitated and also federated at district/state levels. Strengthen governance, transparency, management and systems in village cooperatives and ensure/enable autonomy for their operation by allowing these cooperatives to really function as cooperatives - by, for and of the people. Further, the SIFFS/Matsyafed 'model' for harvest fisheries and SIFFS/Dhan/ICNW models for post harvest activities could be adapted and replicated – all at the village cooperative level. Also, the affiliated state federation could be upscaled into an autonomous Fisheries Cooperative Bank (with district outlets). The help of NABARD and NCDC could be taken in this regard for capitalising this fisheries bank and also building its capacity

47. **Provide Composite Life and Health Insurance Products for Protection:** The Governments to structure composite (life and medical) insurance products as current penetration of such financial products is almost non-existent. There is also a need to sell through intermediaries like (SIFFS/DHAN/WWF/ICNW) and their federations or other innovative mechanisms like CRIGs[4] /SHGs to ensure on-time payment of premia and good service. Private sector insurers like Tata-AIG have very valuable experience in structuring and distributing products for low income people and they could be invited to pilot models and products as also others.

48. **Enabling Provisions Needed to Assist in Delivery of Insurance Products:** For asset insurance for boats to be expanded, several internal control aspects need attention – like registration number, location etc. These aspects require regulatory attention from the government to ensure cent percent registration of the boats. Special mechanism like numbers in multiple places, stamping of special (identification) numbers on bottom of boat and other strategies could be introduced.

49. **Voluntary Savings – Attitude Change, Products and Mechanisms:** The SIFFS system of compulsory contribution of 10% for loan repayment, 4% towards savings and 3% towards meeting expenses of federation has resulted in generating cash surplus and timely loan payment for the fishermen, to a large

[4] *Community Rural Insurance Groups (CRIGs)*

extent. However, there is a need to enable the fishers to inculcate financial discipline and save, voluntarily. Facilitate savings accounts for fishermen/women through a voluntary savings mechanism where liquidity and safety, in that order would be paramount.

50. **NABARD Support for Fisheries Sector:** NABARD MFDEF/Innovation Fund should have allocation to fisheries sub-sector to help pilot test out of various models and methodologies. The usual norms of risk-return trade-off and evaluation of proposals need to be looked at with flexibility in case of fisheries projects, given the unique nature of fisheries. Standards of portfolio quality, capital adequacy and related aspects, should be adjusted to reflect the nature of fisheries sector – this does not imply reduction in standards but rather it calls for adaptation of standards of portfolio quality to the fisheries sector.

51. **Facilitate Establishment of Pilots in Following Areas:** *Gender*: Women have several unique needs and demands and special pilots could be tried and the focus of interventions in the area of gender could include: A) Special Financial Products for Women; B) Delivery of Risk Management Products Tailored to Needs of Low Income Women; C) Reducing Transactions Cost for Retailing with Technology; D) Encouraging Public Private Partnerships to Overcome Market Imperfections and E) Enabling Livelihood Financing for Women through Larger Loans/Individual Lending

52. **Other Aspects:** *(a) Migration and Financing*: How to lend to migratory fishermen in terms of getting repayments? This is an unresolved issue as there are many problems and here again it would be very useful to try different models as pilots and determine suitability to contexts; (b) *Reducing Cost of Inputs:* A recurring theme is the cost intensive nature of fishing –more inputs (kerosene) (etc) for the same output. So, how to reduce inputs and get environmentally friendly fishing technologies and what impact it will have an income/livelihood security is something that needs to be tried out as a pilot.

53. **Do not use traditional MF approaches for Harvest/Capture Fisheries.** Use traditional Microfinance approaches for loan to coolies and women vendors etc: Typical Micro-Credit approaches apply well to financing of vendors/hawkers (women and men), etc and perhaps crew (coolies). Holistic approaches appear to be more suitable for financing activities in the low income fisheries value chain-especially for capture fisheries. This integrated approach can be delivered by multi-purpose, large, well networked institutions that can diversify risks across craft types, geographies, etc.

54. **Tailor Portfolio Quality Measures, Standards and Provisioning Norms to Context of Capture Fisheries:** Portfolio quality measures must be tailored to suit the capture fisheries context. This also means that standard measures of delinquency like PAR > 0 days, PAR>30 days, PAR > 60 days, etc. will have to be adapted to the capture fishery context. Also, the focus on OTRR (ON-TIME REPAYMENT RATE) as a good indicator of Repayment/Portfolio Quality will need revisiting. Likewise, provisioning also needs to follow HISTORICAL DATA other than set percentages and the aspect of probability of loan write-off has to be verified, with regard to higher age past due loans. One another issue here is the need to tailor the portfolio quality ageing classification data mining of large longitudinal databases with regard to aspects like the following is needed:

    1. How best to categorise past due loans when there is only notional repayment?
    2. What is the most critical age of a past due loan – i.e, when it is good to be written off?
    3. What percentage of written off loans (as per above criteria) are actually lost? and
    4. And several other aspects like these.

55. **Support Diversification in Capture Fishery through Innovative Priority Sector Financing:** There is still unexploited potential in the offshore waters (long line shark and tuna fishing, for example). Finance must support diversification into these aspects through innovative financial products (and carefully framed pilots), covered under Priority Sector Financing. Financial instruments (soft loans, equity, risk covers and insurances) along with financing for other inputs (research, training, infrastructure support, information and market intelligence, safety measures, etc.) should be used to encourage the more enterprising of the fishers to diversify from inshore to the offshore waters.

56. **Ensure Post Harvest Fishery is a Thrust Finance Area for Financial Institutions:** There is a need to strongly finance storage and holding facilities (ice, iceboxes, storage facilities) so that producers can negotiate better prices from the market. Such entrepreneurial units can also provide services such as floor prices, market intelligence, credit against fish held in stock and even market “futures”, especially in

partnership with exporters, banks and wholesale merchants. The traditional Microfinance approaches using SHGs/JLGs could also be tried here as delivery mechanisms.

57. **Classify Supplies by Fishers as Deemed Exports:** Special loans (and tie-ups with exporters) could be provided to intermediary/producer organizations like SIFFS. Especially, when they supply to exporters or large processors (and product is traceable), this could be classified as DEEMED Exports and credit for working capital could be provided, much like packing credit.

58. Innovative financing can be done by lowering input costs through making finance available to intermediaries/Producer Organisations at the same cost as had by exporters of marine products and/or cash flow based financing. NABARD should also provide working capital/other loans at packing credit interest rates to producer organisations like SIFFS – especially, if the produce is traceable as going to exports (Deemed Exports). NABARD could also refinance such loans.

59. Innovative Financing for Fisheries Including Under Priority Sector: All of these could be classified as Priority Sector Financing and encouraged; Special loan for Disinvestments/Downsizing.

    Special loan for Merchant Traders; Flexible loans for Fishermen: *Cash Flow Based Financing for Harvest Fisheries*, *Debt Swap*, *Flexible Credit Limits for Enterprising Owners*, etc. are the need of the hour; Special Loans for Women; Special Loans and innovative Risk Management Products for Crew that can be delivered through group methodology such as SHG (DHAN) methodology or Solidarity Group (ICNW) methodology and *Micro-pensions with flexible payment options* through linkages to UTI Mutual Fund (or Others) could be designed and delivered for coolies.

60. **Capitalize and Capacitate Producer Organisations/MFIs/RFIs:** Producer Organisations/MFIs/RFIs should be capitalized and capacitated so that equity investment can occur in these along with a package of (institutional) systems support, training, MIS and other aspects.. Quasi equity investment and flow of loans to good intermediaries (like Cooperatives/Producer Organisations/MFIs, etc.) should also be facilitated.

61. **Credit Information and Bureau:** Collateral substitutes should be created to gain historical information and reduce risk perceptions – this includes integration of low income fishery loans and transactions into MIS of Producer Organisations with CIBIL as also establishment of a credit bureau for low income fisheries.

62. **Establish A Fisheries Innovation Challenge Fund:** Establish a Fisheries Innovation Challenge Fund (FICF), which will strive to support innovation and financial deepening through public – private partnerships and linkages, with investment by various stakeholders. *This can help Producer Organisations/Microfinance industry and private sector innovate and develop models, methodologies, products, processes, procedures and performance measures for financial intermediation specially tailored to the needs of low income fishers in several contexts.*

63. **Support Priority Demonstration Pilots On Financing for Fisherfolk:** Governments and Donors could initiate action pilots to test out new models, new methodologies and new products like micro-pensions, alternative savings products, technology based delivery systems , special loan products for Fisherfolk like flexible versus fixed repayment, individual lending models, cash flow based financing etc. These could be supported through the challenge fund: A) Special Financial Products for Fisherfolk; B) Delivery of Risk Management Products Tailored to Needs of Low Income Fisherfolk; C) Reducing Transactions Cost for Retailing; D) Encouraging Public Private Partnerships for Diversified Livelihoods and E) Enabling Livelihood Financing for Fisherfolk Through Larger Loans/Individual Lending

64. While almost all of them are focussed on children's education, few fishermen are educated beyond class X. Women and girl children are more educated than the men/boys. Given very limited opportunity of alternate employment, most boys drop out of school from class VI onwards and start venturing into sea with their fathers. Girls study upto class X and in some cases even go on to finishing their graduation. Most families are nuclear families. However the son is expected to take care of the parents by providing financial support. Almost 60-70% of the income is spent on food/clothing and shelter. And close to 30% is spent on medical emergencies. Hence opportunity to save is almost non-existent and in most cases the fishermen rely on borrowings. There are defined periods of low income across geography – April & May when there is a government ban on fishing, Oct/Nov on account of monsoons. In addition to the above periods of not venturing into sea, almost all the fishermen interviewed stated that 2/3 days a month they

are unable to go out for fishing on account of ill health. In effect their earning capacity is only 7-8 months in a year. However their expenditure is through the year. Hence during periods of no or low income, the family invariably resorts to borrowing even for basic needs like food and shelter. The other times when they resort to borrowings are - medical emergencies, children's education, building a house, marriage, social events, death in family etc. Since they have limited access to banks or other formal financial institutions most communities have built a strong social network where friends and relatives help each other out in times of need. And this kind of financial support is in a way a saving mechanism for them. Apart from social support, most fishermen have borrowed heavily from fish traders and or moneylender at exorbitant rates of interest. The only source of funds from banks was through "jewellery loan".

65. In light of the above, it can be said that:

- Of the 1000 odd individuals interviewed (individual interviews and FGDs) less than 2% had an account with a bank or Post Office and even fewer had an insurance policy. That reflects that despite overall growth in the economy, this sector continues to be excluded by the financial sector.
- Post tsunami, the general perception is that the business volumes have dropped. The latest figures on marine exports published by RBI seem to validate the general perception. Marine exports grew by 36% in 2006 to USD 738 million but grew only by 4% in 2007 over 2006 to USD 771 million. The sea faring fishermen continue to be the price takers.
- The rural markets continue to be operated by few traders. The market operations are not streamlined or automated and hence data is not easily available to capture. Only in those markets where there are intermediaries like SIFFS or MATYSAFED are records maintained to track daily sales volumes by the fishermen.
- There is huge variability of daily sales volumes. Analysis of available data over last 12-15 years validates the daily variability of sales volumes. Thus it is difficult to predict earning potential of the fishermen.
- It is still a cash intensive society. All dealings are in cash only. And most fishermen leave it to their spouse to manage the household and handle the finances. The society is a close-knit society with strong social and economic support for each other. Hence even savings are kept in form of advances with each other. Society and friends support each other in times of emergencies and other financial need.
- The fishermen has always lived for the day and never been disciplined to save for the future. Hence apart from creating social network/financial support, very few fishermen have either opened a bank account or taken any financial product.
- All of the above have contributed to most formal financial institutions to stay away from this segment.

66. **Regarding Demand Side Issues, the following deserve mention**

- Post Tsunami, there has been a rush to buy fibre boats with either inboard or outboard engines. This has been primarily on account of two reasons – One was the rush by government and other non-government/aid agencies offering help to the affected families. This has resulted in over expectation of financial support by these fishermen and resulted in most of them borrowing huge sums of money to buy these boats. Secondly, the fear of setting into sea on smaller crafts post an incident like Tsunami resulted in fishermen opting for fibre boats with crew of 4/5 in each boat.
- The sudden increase in number of boats with higher capacity engines has resulted in over capacitisation. This has resulted in most fishermen reporting lower catch.
- The fishermen had high spending on – Children's education, marriage and medical emergencies. Invariably they relied on social network or the money-lender for their financial needs. The only exception to this was when they approached banks for "Jewellery loans".
- In most cases, the fishermen had no alternate source of earning. While in few of the families, women were also engaged in the business, most often the man was the sole earning member. And any set back to the man's health had a huge negative impact on the family.
- Health issues continue to plague almost all families. Aged and women were worst affected. In most cases the women were weak and anaemic. Men's health was often impacted on account of alcohol consumption.

- Reliance on alcohol and or tobacco was very high across the fishermen community. Younger fishermen stated that they are not addicted to alcohol, but alcohol consumption and related violence on spouse is a fairly common occurrence.
- The general level of awareness of financial products is negligible. Quite a few of those interviewed stated that they had opted for life insurance scheme while availing bank loan but subsequently did not renew them as they did not understand the benefits of continuing in such schemes.

67. **With respect to Supply Side Issues:**
    - Most banks/Financial Institutions continue to shy from lending to the fishermen community given the bad credit history. As a result, only development funds are spent on the fishermen and no commercial or economic funds are being earmarked for them.
    - There is a lack of understanding of the business dynamics of this industry. Fishers have financial needs like any other customer, but there needs have to be met with products tailored to business dynamics. For e.g. – insurance products have to factor in the unpredictability and variability of earnings and hence have to launch products wherein premia amounts can be varying or paid in lumpsum rather than expecting regular structured payments over time – at least for capture fisheries.
    - There is need of appropriate marketing efforts by the financial institutions in marketing their products. Lack of awareness and understanding.

68. Thus, a coordinated effort by all stakeholders is necessary to address the various problems – Government, NGOs, intermediaries like SIFFS, banks, insurance companies, other financial institutions and last, but not the least, the fishing community which includes sea going fishers, traders, processors as well as exporters. Other key issues including the following has to be addressed:
    - There is need for tailor made solutions after taking into consideration the business dynamics of the fishing community. The business cycle and the financial needs of the fishers has to be understood and tune the financial services relevant and beneficial to them. There should be separate financial products for capture fisheries, vending, trading etc – all of which can address their risk and vulnerability.
    - Regulators should redefine measurement criteria to enable MFIs/POs and banks to extend financing to fishers. This is particularly relevant given the variance between high and low earning days and hence the impact it has on repayment capabilities.
    - Further, the untapped women power should be utilised significantly. Women in this community, in general, are more educated than the men and are responsible for managing the finances of the household. Only a marginal segment of the women population are involved in any economic activity. Almost all the women who are into income generation activities were associated with marine fishing. Hence the entire household earnings depends on marine life. There is an urgent need to enable them to diversify their earnings. This would reduce the variability of their earnings and also enable them to manage their financial commitments better. One of the reasons for the fishers defaulting on the loans is on account of over reliance of HH income from marine life and since the income is uncertain and highly variable on a daily basis, their repayment capacity becomes suspect. Income from diverse sources will reduce their over dependence on fishing. So any financing that can be provided towards income diversification will be most beneficial.

69. Finance for fisheries has to undergo a necessary revolution of being sector responsive and this means that the nature of the products being offered and the institutions that deliver them will have to change fundamentally. The Microfinance industry has to move beyond providing “Microfinance” and other basic financial services (some savings) to offering a wide range of tailor made financial services (including credit, savings, health insurance, pensions, remittances etc) that can really empower fishers and also enable them to reduce their risk and vulnerability. A new set of institutions (Corporates, Postal/Commercial banks, Insurance companies, Pension Funds, Telecom Companies etc) are keen to enter this market sector and they need to be incentivised to design and deliver responsive financial services to fishers. Together, the diversity of institutions, products and service providers should be very welcome as all of them have great scope to broaden and deepen the outreach of financial services to low income fishers in a cost-effective and sector sensitive manner. All of this calls for various stakeholders including Governments, Bi-Lateral Donors, Multi-Lateral Donors, MFIs, NGOs, Civil Society and the Private Sector to join hands to enable delivery of sound, responsive, affordable and market oriented (fisheries sensitive) financial services tailored to special and unique needs of low income fisher clients, in ways that are advantageous to both the clients as well as institutions.

70. To summarise, most banks Financial Institutions categorise this sector as “bad credit or high risk”. As a result only development funds are spent on the fishermen and no commercial or economic funds are being earmarked for them. Despite an established need, very few fishermen had bought a financial product or service primarily on account of lack of awareness and understanding. There has been inappropriate benefit schemes that are in place -subsidies based on engine power or affiliation to certain member organisations (like MA TSY APED) has resulted in unequal distribution of government grant and as well as contributed to the already growing issue of over capacitisation. ,

71. Post tsunami, almost every family is feeling the pressure of poor catch and lower earnings. Most of the families continue to live in poverty. Almost all of them are living in kutcha/semi pucca houses. Family size continues to be large with average number of people per household of almost 6. The one noticeable change post tsunami is that more fishermen have switched to fibre boats with either inboard or outboard engines (engine make and capacity seem to be determined by the intermediary -SIFFS recommends outboard motors whereas in Adiramapattinam inboard motors seem to be more prevalent). So fishermen who used to venture in to the sea in catamarans pre Tsunami have either bought fibre boats or have gone back to being coolie/crew members. However the financial plight of both sets of fishermen continues to be poor. Those who opted to buy fibre boats have done so by borrowing large sums of money, almost upto Rs 1.5 lacs, from local money lenders. Interest outflow on these loans are from36% to 120% and in some cases even 190%. With more boats venturing into sea from same geographical area, there is a drop in the earning per boat resulting in even bigger financial crisis for the boat owners. The plight of the coolie labour is even worse and they have absolutely no financial support. Even during Tsunami, almost all aid was directed at boat owners. Household earnings comprises only of income from fishing and there is no secondary source of income. Even in those families where the women are into income generating activity, her enterprise is also involved in fishing/marine life. So when there is an economic downturn, the household has no option but to live on borrowings.

1 Introduction

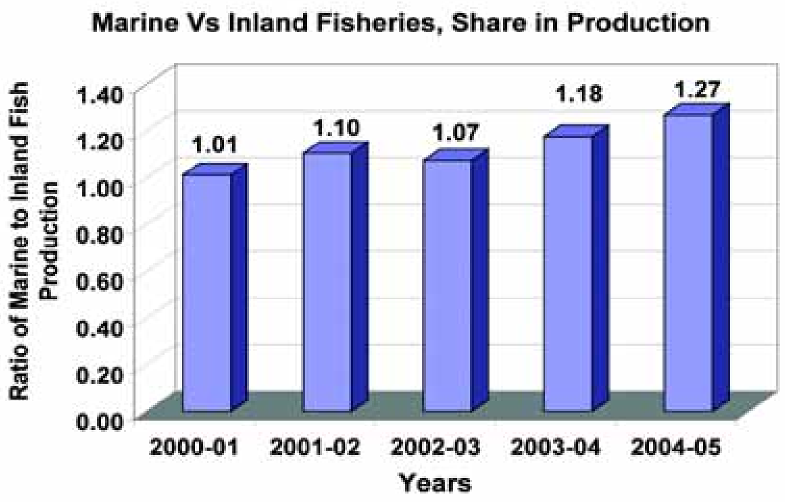
1.1 Background

Since 1950-51, when the first Five-Year Plan was initiated in the country, technology inputs have changed the face of Indian marine fisheries, which is now characterised by plywood and fiberglass traditional fishing crafts fitted with outboard motors, synthetic gear and a large number of small mechanised fishing vessels.

The 8,100 km coastline is dotted with fishing harbours and fish landing centres, which are slowly being linked to modern processing houses with somewhat state-of-the-art facilities to cater to domestic and export markets. Without question, marine fisheries today constitute a source of valuable food and employment, especially for low income people, and are a net contributor to the balance of payment.

In fact, marine fisheries have progressively increased by nearly six times during the past 55 years and as evident from graph given below, major fish production comes from the coastal resources. About 0.933 million people are said to be employed in the marine fisheries on a full-time basis, 1.01 million on a part-time basis and 1.39 million are engaged in other ancillary activities[1] ." Yet, the lives of the low-income fisherfolk, who contribute so much to the national economy, are full of uncertainties, risks, vulnerability and hardship.

Figure 1: Marine vs inland fisheries, share in production



Fisheries in India are still under-developed in terms of potential realized. Only a small portion of the resources is being exploited at present mainly for three reasons: (1) The small country craft cannot operate beyond a few miles from the shore; (2) over a large area, adequate harbour and landing facilities do not exist, and (3) there is very little specialized financial assistance available to fisherfolk from formal sources.

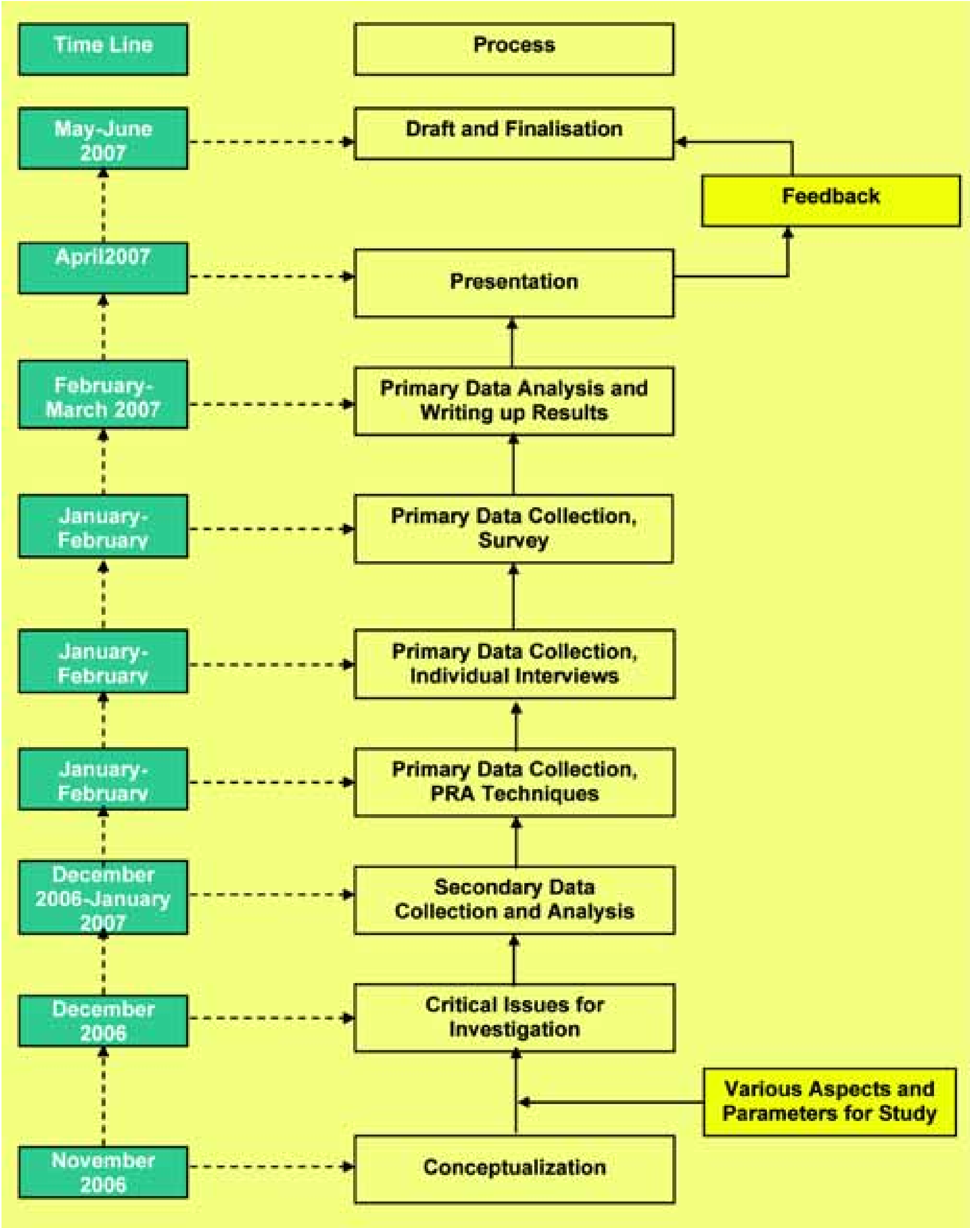
1.2 Context

It is in the context above, and that of the December 2004 tsunami, that the FAO/UNTRS (Tsunami Recovery Unit) in Chennai carried out the project under discussion. It sought to understand the financial services sector with regard to low-income fisherfolk, using a comparative analysis framework. The broad process followed is given in **Figure 2.**

---

[1] *Reproduced with some adaptation from The Hindu Survey on Fisheries (2006)*

Figure 2: Proposed methodology



1.3 Objectives

- To understand the extent to which men and women in fisheries are excluded from the mainstream financial system
- To identify their various needs for financial services across pre-harvest, harvest and post harvest fisheries
- To understand supply-side perceptions and constraints
- To propose practical measures and recommendations by which a wide range of financial services can be delivered to low-income fisherfolk, and
- To explore the above, in the post-tsunami context in Tamil Nadu and Kerala

2. Salient Points of Methodology

2.1 Methodology

This FAO/UNTRS sponsored study was conducted in two states (Tamil Nadu and Kerala) and the Union Territory of Pondicherry). Primary data collected from 10 districts — Chennai, Chengai MGR, Pondicherry/Cuddalore, Nagapattinam, Tanjore, Ramnad, Tuticorin, Kanyakumari, Trivandrum and Kollam. Secondary data analysis was done, using Internet and other relevant material[2]. Special analysis was carried out using MIS data of SIFFS/ICNW going back several years, relating to several thousand clients[3] (fishers).

Individual interviews

A 21-page questionnaire, that took about two hours per respondent, was given to 221 respondents (139 men and 82 women). The main subject areas in the questionnaire were capture fisheries and fish-vendor marketing. Stratified random sampling was used to select respondents for the study.

The draft questionnaire was prepared, pre-tested and modified. The finalized questionnaire focused on several aspects including (but not limited to) the following:

- demographics of the household
- access to financial services such as savings, loans, insurance etc
- lifecycle events, setbacks and emergencies faced by the clients and associated expenditures
- information on various financial needs of the clients and associated risks
- coping mechanisms and strategies used to satisfy the financial needs
- respondents' perceptions about the likely occurrence of various risks
- extent of hardship due to occurrences of various risks
- existing mechanisms to cope with these risks and several other aspects

The finalized questionnaire was given[4] to about 221 respondents. As indicated in Table below, nearly 95.93% of the total questionnaires were found to be valid and reliable[5].

Table 1: Validity and Reliability of Questionnaires

S.No	Description	Number	Percentage of Total
1	Valid Questionnaires	212	95.93%
2	Rejected Questionnaires	9	4.07%
3	Total	221	100.00%

The respondents were members of SHGs, co operatives, producer organizations and other forms of low income-finance entities and they were spread over 3 states of India.

Also, to enhance the reliability and validity of the study in terms of the asymptotic[6] nature of some estimators, it was decided to enhance the sample size from the contractually agreed/ mentioned 60 respondents. Guidelines vary about optimal sample size. Statistics however offers a rule of thumb (V K R V Rao and others, 1967) about decisions on sample size, so as to take care of the asymptotic

---

[2] *312 studies, articles and papers were consulted*

[3] *Database spanned 12 years for SIFFS and since 1997 for ICNW*

[4] *The process of administering the questionnaires was one of exploration rather than confirmation. Also, great care was exercised not to bias the respondents. Te objective was to get them to be at ease and self-report on various aspects/events/activities (as these happened/unfolded).*

[5] *Tests of validity included examination of content validity (Psychometric Theory, Nunnally, 1967). Questionnaires with incomplete information, contradictory statements and inappropriate characteristics and the like were rejected.*

[6] *Asymptotic means as 'n' tends to infinity or 'n' is large.*

nature of estimators. This rule of having a sample size greater than 100 has been taken as a reference and a total of 212 final respondents have been used in this study. The sample diversity for the study is given in **Table 2**.

Table 2: Sample Diversity Arises From

Different Geographic Areas	Various Sources of Funding	Different Types of Livelihood	Various Models
• Well- Developed Coastal Areas • Less Developed Coastal Areas • Urban Metros • Shanty Towns • Peri-Urban Areas • River Irrigated Coastal Areas • Multiple States of India (TN, Pondicherry and Kerala)	• Wholesalers • Donors • Savings (self-generated money) • Equity Capital • Commercial Financial Institutions • Private Investors	• Capture fishing • Vending • Trading • Owners • Crew etc	• Thrift Cooperatives • SHGs/Village Banks • Producer Organizations • National Cooperatives • CDFIs • MFIs • Other forms of Development Institutions involved in providing finance to the fisherfolk • Informal lenders

61 men and women groups were chosen from across Tamil Nadu and Kerala. Each FGD lasted approximately 2.4-2.5 hours and had 9-14 participants per group. 23 of these FGDs also had PRA sessions.

The FGDs focused on various aspects relating to financial needs and risks including life cycle events, setbacks and emergencies and associated expenditures, client feedback on currently accessed financial products etc. The focus groups' discussions (FGDs) had the following characteristics:

1) There were women-only and men-only FGDs, although others used to sit at the periphery and sometimes offer comments

2) The exact size of the FGDs varied from place to place. But on the average, 9 to 14 people were part of an FGD. A total of 732 people participated in the entire 61 FGDs held in various areas, giving an average of 12 participants per FGD

3) In terms of time taken, on the average, an FGD lasted 140 minutes. This included the time for assembling the participants, warm-up and introduction time, actual discussions and wrap-up formalities

4) The local language was used in all the states. Further, MFI/Institutional support staff (like field workers) were also present during the FGDs (at least during the introduction and wrap-up)

5) A combination of techniques including PRA tools, general discussions, question and answer dialogues were used as part of the FGDs

6) A caveat is in order here because most of the FGDs have raised significant expectations among clients. This is one aspect which has been kept in mind while providing recommendations.

Exclusive PRAs with 11 men and 12 women groups were chosen from across the various areas. Each PRA lasted approximately two hours, with 5-7 people participating in the exercise.

Discussions

Detailed discussions were held with bankers, government staff, financial institution staff, equity companies, insurance companies and exporters. Thirty six suppliers and 28 intermediary/MFI staff from across all levels took part in the study. Detailed discussions were also held with all four regulators and a panel of 19 experts with an average of a decade of experience in their respective sectors. This panel included seven experts from fisheries and 12 from micro-finance and micro-enterprises.

Key Institutions

The following institutions helped with the discussions – either directly, through personal interaction, or through their materials that were used in the study.

- Fisheries Department (Governments of Tamil Nadu and Kerala)
- SIFFS, church organisations, DHAN Foundation, ICNW – Other MFIs, SHGs, NGOs, local institutions
- Fishing community members not affiliated to any institution
- TN Fisheries Cooperative Federation and Matsyafed (Govt of Kerala)
- Kudumbashree and Magalir Thittam (including past MDs)
- Fishermen Welfare Corporation (GoK)
- Fisheries and Ports (Governments of Kerala and Tamil Nadu)
- Centrally sponsored institutions: MPEDA, CMFRI, CIFT
- Fisheries colleges and R&D Institutions
- Ministry of Commerce and Ministry of Finance, Government of India
- Smaller SHGs and their federations
- NGO/INGO initiatives on entrepreneurship, employment generation, education, health care, disaster preparedness, OBM and boat repairs, women in fish vending, water and sanitation
- Producers' organisations
- Rights-based Initiatives and their networks (civil society)
- Policy Research, R&D and Advocacy Organisations
- Plus several other stakeholders including regulators (RBI, NABARD etc), supervisors, Industry Associations, MIS Vendors, Capacity Builders and Training Institutions and several others.

This apart, market data from 12 wholesale and retail consumer markets were analysed as also export data from Ministry of Commerce, Government of India (GoI).

While the above section established the context of the study and also outlined the salient aspects of the methodology, the following sections will present the actual findings with interpretations and also outline the recommendations.

The remainder of this paper is structured as follows:

Section 3 provides the various general findings and interpretations with regard to demand side aspects. It has several sub-sections that detail specific findings and implications - including those related to life cycle events, setbacks, emergencies and coping mechanisms (with associated expenditures) that cause fisherfolk/clients to be at risk in the first place. It also provides a clientele (fishers) suggested mapping of these situations with regard to current and new financial products (that can be used) as also discusses the major (MFI/PO) models in the sector.

Section 4 highlights the characteristics/dynamics of the sector and outlines Implications for design and delivery of financial services. This section focuses on economics of capture fisheries, roles of women, aspects of diversification and the like

Section 5 discusses supply-side aspects including supplier perceptions of fisheries, constraints and related aspects

Section 6 outlines pragmatic recommendations for various stakeholders including suppliers, governments, regulators and FAO/UNTRS in terms of what can constructively be done to enhance flow of financial services to small scale fisheries.

Section 7 concludes with a summary discussion of the key issues, based on the study

Section 8 is the Annex with several appendices

3 Key Findings – Demand Side Aspects

3.1 Simple Fisheries Value Chain

As shown in Figure 3 (next page), a large number of stakeholders currently deliver financial services (mainly, loans) to low-income fishers. Blue arrow lines indicate existing relationships. Dashed and black arrow lines. Indicate potential relationships. Supplier relationships are outlined in the table below.

Table 3: Actors in Value Chain and Existing/ Potential Suppliers of Financial Services

Actors in Value Chain	Existing Supplier	Potential Supplier[7]
Small scale producers – capture fisheries	Intermediaries including CBOs, producer organisations, a few MFIs, Govts and Govt FIs and a range of informal suppliers.	Other forms of intermediaries like postal organisations, banks in retail and MFIs apart from producer organisations and Govts and Govt FIs etc.
Small-scale producers – Vending/Trading	Intermediaries including CBOs, Producer Organisations and MFIs and Govts and Govt FIs and a range of informal suppliers.	Other forms of intermediaries like postal organisations, banks in retail and MFIs apart from producer organisations and Govts and Govt FIs etc.
Producer Organisations	DFIs and some commercial banks although many are risk averse and Govts and Govt FIs in certain cases	More commercial banks, institutional equity, private investors and others apart from Govts/Govt FIs
Wholesalers/Pre Processors	Commercial Banks and private sources and a range of informal suppliers.	Commercial banks, retailers, institutional equity, private investors and others like producer organisations
Trader/Merchant/Agent	Wholesalers/Pre-processors and a range of informal suppliers.	Commercial banks and microfinance intermediaries, producer organisations and several others like retailers and post offices
Medium/Large- Scale Exporters	Commercial Banks and private sources	Commercial banks, retailers, institutional equity, private investors and others

The relationships defined above are used to make recommendations to enhance the flow of finance to low-income fishers. The potential suppliers column is a suggestive column. It has been created keeping in mind a wide range of services demanded by low -income fisherfolk.

3.2 Viability of Fishing and Related Issues

A combination of variability in catch, technology upgrades, over-capitalisation, rising costs, aggressive fishing, overcrowding, etc. has made fishing and fishing-related occupations unviable. Result: Fishermen are getting increasingly dependent on loans to finance their expenditures and also using loans as coping mechanisms. The key expenditures are:

a) *Capital expenditures*: which include purchase of boats, launches, nets and engines etc

b) *Running expenses:* which include boat, net and engine repairs, ice fuel and food etc

c) *Other Expenditures*: Medical, emergency and other expenditure for family including education.

While capture fisheries are unviable for several reasons, the issue of variability in catch is a major one. The multi year catch data analysed using the SIFFS database, clearly indicates the highly variable nature of capture fisheries. More such data given in **Annex 1** clearly shows that capture fisheries is a highly variable (income providing) livelihood. As noted in **Figure 4** below, a fisher going to sea for an average of 29 days a month gets Rs.1298 avg catch per day where as a fisher going for 22 days gets just Rs.431. Likewise, a fisher going for an average of 21 days a months gets as high as Rs. 5960 catch per day. The above clearly illustrates the highly variable nature of income in capture fisheries.

[7] *This is also suggested as a conscious strategy to broad base the suppliers*

Figure 3: Simple fisheries value chain and existing/ potential financing service producers[8]

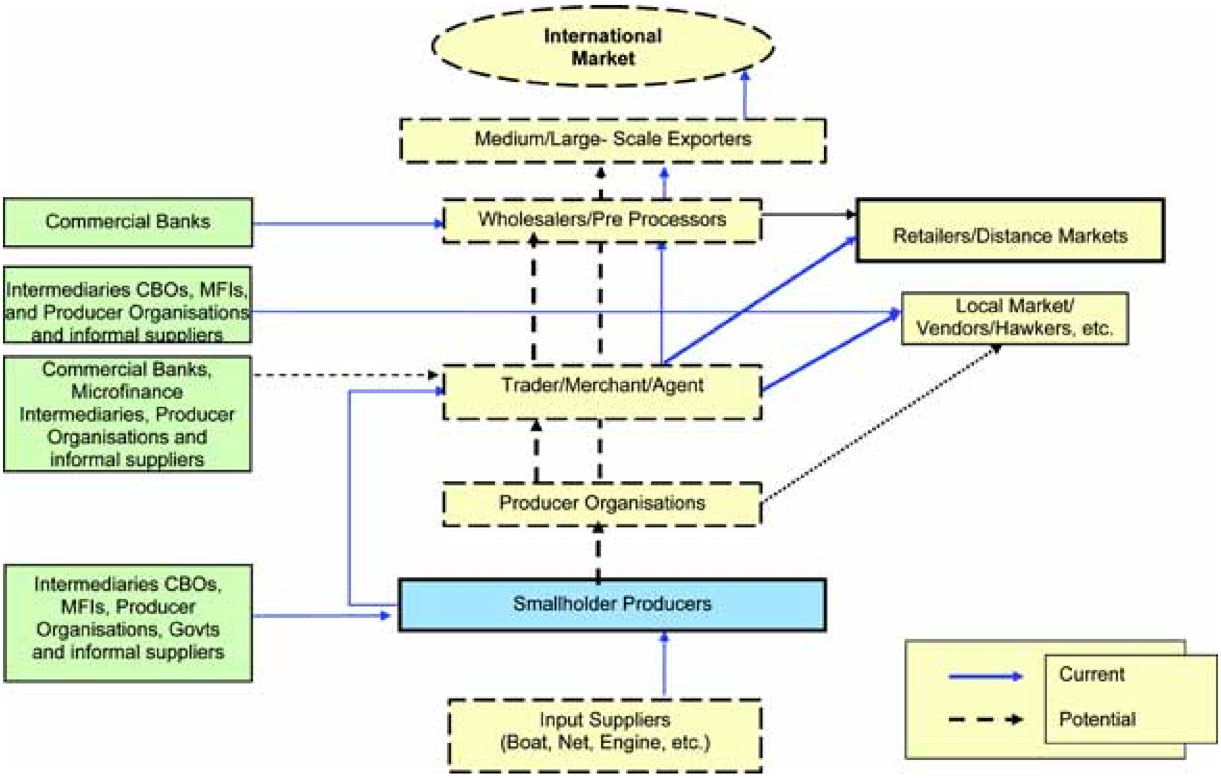
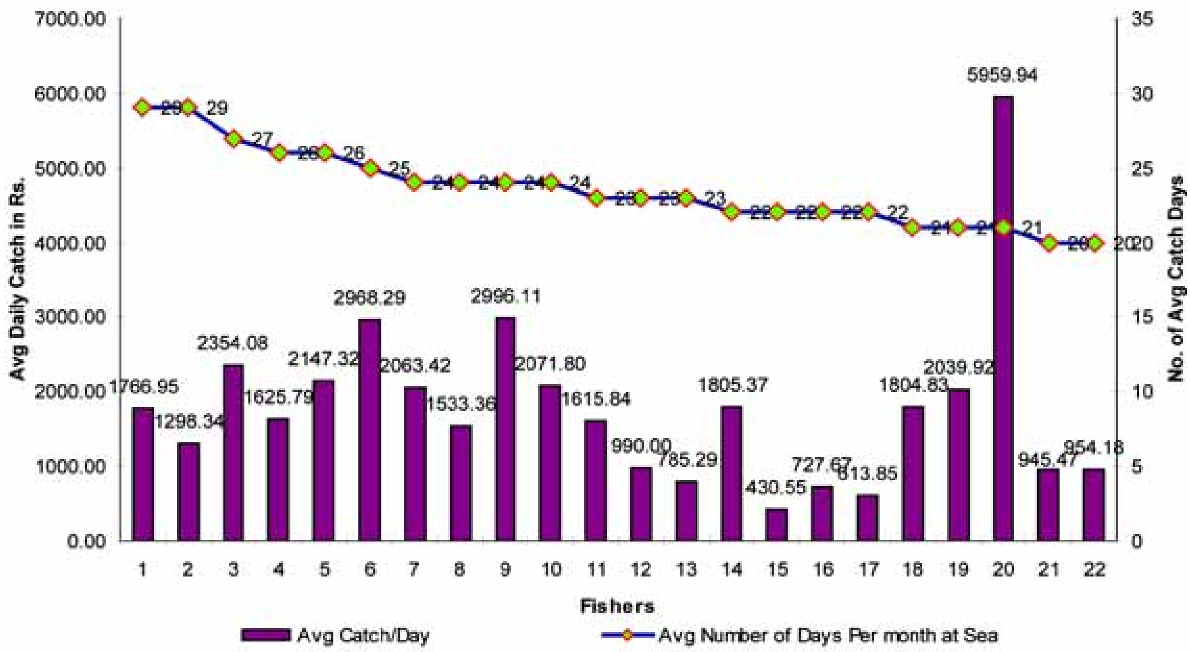


Figure 4: Multi year catch data analysed for about 957 fishers



Lower viability of vending is because of several aspects including perishability, erratic supply of fish stock, lack of appropriate storage facilities and several other aspects including borrowings for emergencies at high cost and the like.

[8] *Source: Adapted from Bob Fries and Anicca Jansen, (2005) and other resources, using data collected in the study*

In fact, of the 212 surveyed respondents, as shown is **Figure 5**, 123 of them claimed that the viability of fishing/related occupations like vending has come down. Only 13 of the 212 respondents said that the viability of fishing/related livelihoods had increased.

Further, of the 123 that had claimed that their principal livelihood viability had gone down, a significant majority (105 people or 85%) said that it was indeed a matter concern and there is now a greater risk of starving. Just 7% talked about the availability of alternative options.

So, with decreasing viability, it is clear that fishers use borrowing as the major coping strategy/ mechanism.

In fact, data across both states indicates that small-scale fish workers cannot access formal institutional credit except through intermediary peoples organisations (SIFFS), state cooperatives (MATYSAFED), NGOs, MFIs (Dhan, ICNW, Sneha, Shanti Dhan, IASC etc) and SHGs. The lone exception seems to be gold loans for which the fishing community access banks/NBFCs quite easily and DIRECTLY.

In numerical terms, as Table 4 indicates, just about 6% of the volume of total loans, amounting to Rs. 11,38,949, was outstanding from banks. Only 18 respondents said they had taken loans from banks. As many as 194 said they could not access bank finance independently.

Small cooperative banks operate in some areas, but they are not competitive enough and cannot meet the volume of credit required by craft/gear owners (average Rs.30,000 to 70,000/year/craft).

Figure 5: Has viability of principal livelihood gone Up down last year?

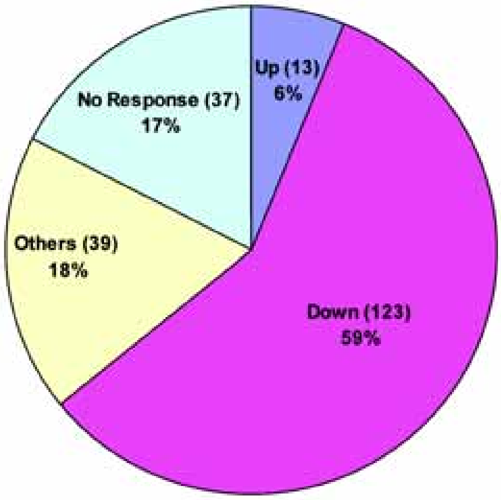


Figure 6: If variability has gone down, what does it mean?

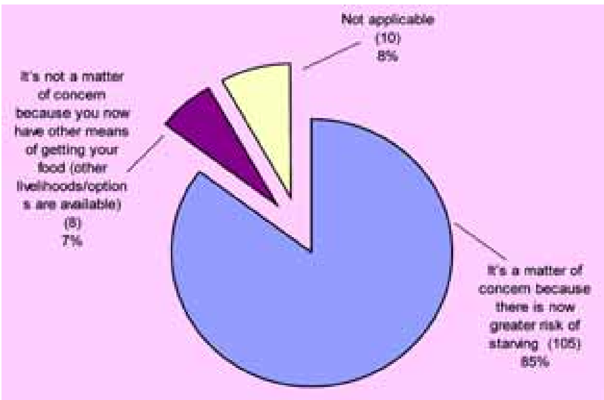
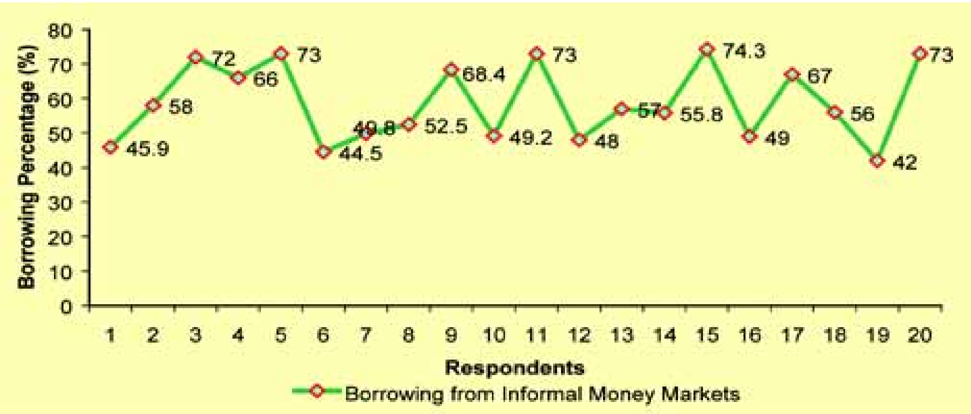


Figure 7: Percent of borrowing with informal money markets



Fishing communities find it very difficult to access loans for education, job-oriented training, housing and important consumption needs such as medical emergencies. People still rely on money lenders, financiers, chit funds, and borrowings from friends and relatives to raise funds for life cycle needs, housing, education of children, setbacks and emergencies, etc.

As things stand, the community is heavily dependent on informal money markets for meeting almost all their consumption and life cycle needs. In many cases, even for production purposes, they have to rely on informal money markets including trader, merchant and money lenders. And for the poorest among these, even that appears to be getting difficult. Please see **Box 1**.

Box 1: Major Reasons for Downturn in Livelihoods for The Poorest

Major reasons for downturn in livelihood, as mentioned by the poorest respondents:

- Decreased catches
- Bad season
- Price too low relative to costs
- Market has dampened (got weaker)
- Raw material has become scarce/costly
- Inputs have become more costly
- Several others including lack of finance for asset replacement, working capital etc

For some poor households, their ability to cope with 'critical' ban months has gone down, Reasons cited:

- No other serious sources of income
- Shortage has become more acute during this period
- Household has less cash savings
- Household has fewer assets
- PDS and SHG resources are difficult to access
- It is much harder to borrow money from banks/co-operatives etc
- Loans from money lenders/traders/informal sources are also slowly becoming difficult to obtain
- Friends and relatives are unable to help very much

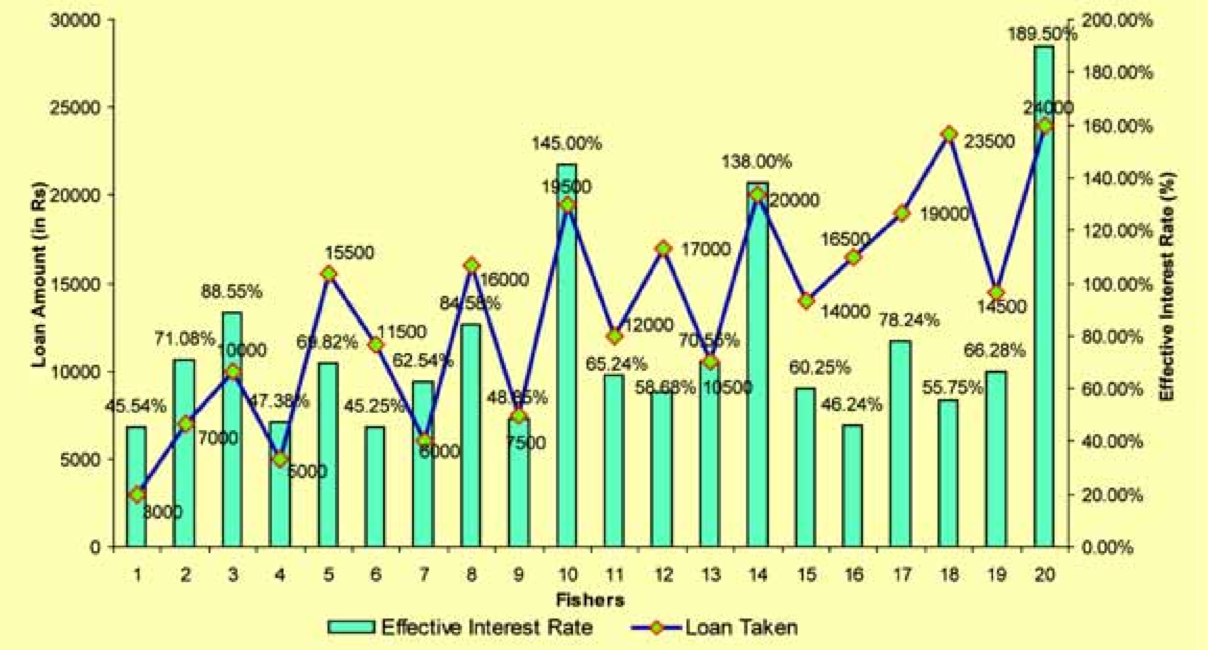
Table 4: Sources of Borrowing across 212 Respondents

	Trader, money lender, merchant and other informal sources	Banks	Government -Sponsored Programs	MFIs/POs etc
Loan Outstanding[9] for 212 Respondents	Rs.1,07,68,243/-	Rs.11,38,949/-	Rs.21,91,614/-	Rs.31,57,994/-
Percentage of Total Loans Outstanding	62.4%	6.6%	12.7%	18.3%
Interest Rates	Vary considerably. and often exorbitantly High, depending on specific informal source EIR ranges Up to 190%	Low and affordable 12% to 14%	Low, affordable and subsidized 12 – 14%	Reasonable and affordable 16 – 28%

[9] *Total loan outstanding was estimated as Rs 1,72,56,800 = 1.73 Crores approximately. There were lots of problems in recall of data and consistency mapping was used to ensure reliability and validity of data*

The effective interest rate has been plotted against the loan outstanding for randomly chosen respondent loans and this clearly shows a majority of them are much over the normal rates of interest that we access loans at. For these randomly chosen 25 loans, the EIRs are given below:

Figure 8: Effective interest rate of loans from informal sources



The perception of respondents on the various channels available and their relative merits/demerits are summarised hereafter.

3.3 Demand Side – Basic Opinion on Channels – Low-Income People's Perceptions

Parameter	Money Lender, Merchant, Trader and Other Informal Sources[10]	Banks	Government Sponsored Programs	Financial Products of MFIs/Others
Ease of Access	High	Low	Low	High – Medium, depending on model Transaction
Transaction Cost of Access	Low	Very High	Very High	Low – Medium, depending on Model and Institution
Lead Time for Loans	Very Short	Extremely Long	Extremely Long	Short– Medium, depending on Model
Repayment Terms	Fixed & agreed and little deviation allowed but flexibility does exist	Fixed and Easy	Fixed and Easy	Flexible
Interest Rates	Vary considerably and often, Exorbitantly high depending on specific informal source EIR ranges Up to 190%	Low and Affordable 12% to 14%	Low, Affordable and Subsidized 12 – 14%	Reasonable and Affordable 16 – 28%
Incentives	None	None	Interest/ Principal/ Subsidies	Repeat (larger) Loans Possible and also Interest Rebates Possible
Repeat Borrowing	Possible only if credit record is good	Possible but not likely	Possible	Stream of Credit is assured if basic condition is met
Loan Access Procedures	Very Quick	Extremely Time Consuming and Complicated	Extremely Time Consuming and Complicated	Simple and Quick but slower than money lender
Loan Application Procedures	Informal but conditions could be exploitative	Exhaustive and Complex	Exhaustive and Complex	Simple and Semi-formal
Collateral and Demand Promissory Note	Mandatory but collateral substitutes also exist – right to first sale of fish to money lender which cuts fishers out of Market etc	Required and Hypothecation of asset may not suffice	Not required although a charge on the asset becomes automatic	Not required – social collateral is used for physical Collateral
Loan Purposes and Amount	Any purpose including Emergency Easily up to Rs 200000	Production credit (PC), Savings etc Not > 30000	By and large Production Credit Not > 50000	Range of products including credit, some old age savings, insurance Etc. Not > 50000

3.4 Borrowing as a Coping Mechanism

The societies, SHGs, thrift co-operatives and MFIs have fixed the maximum amount that can be sanctioned to a borrower. While this varies across models it hardly exceeds Rs. 50,000. The table below provides data on average loan sizes/ranges and purposes in SIFFS societies across years. A limitation with these models is that they have not reached potential clients in all areas within a state and/or across states.

In the absence of institutional credit, the fish worker's only recourse (as a coping mechanism also) is mainly the informal credit system. The average REPORTED indebtedness across geographies, craft types, activities was Rs.81,400 and highest debt outstanding was Rs. 2, 45,000. There were problems in estimating and triangulating the loans outstanding data as RECALL was required and people were busy/ suspicious. The rate of interest charged, ranged from 24 to 190%,

[10] *Very few respondents mentioned other informal sources and also friends and relatives do in fact take interest, when they help out their peers. Only for dire emergencies, were interest free loans seen in few cases*

Table 5: Details of Different Types of Loans Given By SIFFS[11]

Sl. No.	Purpose of loan	Purpose-category	Beneficiaries	Loan amount (Rs.)	Group or individual	Loan per head
1.	Purchase of fishing equipment (motorised unit)	Production	Men	25,000-75,000	Individual	6,250 -10,000
2.	Purchase of fishing equipment (non motorised)	Production	Men	5,000-10,000	Individual	5,000 -20,000
3.	Purchase/ installation of ice boxes	Post harvest	Men/ women	5,000	Individual/	5,000 -10,000
4	Working capital for fish vending and curing	Post harvest	Women	1,000-20000	Individual	1,000 -10,000
5.	Alternate employment (small businesses other than fish vending)	Alternate employment	Women	10,000-20,000	Individual	5,000

Table 6: Loan Amount Vs. Cost of Fishing Units, The SIFFS Experience

Item	District	Cost	Cost of full unit*	Loan amount	Loan as % of item cost	Loan as % of unit cost
Out Board Motor-10 hp	Trivandrum	57,000	1,75,000	75000	132%	43%
Plywood vallam	Trivandrum	75000	2,00,000	75000	100%	38%
Kattumaram (motorised)	Kanyakumari	10,000	1,00,000	25000	250%	25%
Kattumaram+1 net (non motorised)	Trivandrum	15,000	40,000	7,500	50%	19%
OBM-8 hp	Quilon	55,000	1,50,000	40,000	73%	27%

Based on the study, it can be argued that irrespective of the purpose, borrowing from various sources (even at very higher rates of interest) is used as a serious coping strategy by the fishers.

With regard to the issue of demand and supply for credit, across the 212 respondents, an average loan requirement of Rs.195,000 was mentioned for productive purposes. However, given the need to downsize/ downscale fishing in the inshore waters and also given the need to regulate fishing so as to prevent over exploitation of resources, this paper does not project total demand. This is because there is a need to diversify away from in-shore fishing as also address other financial needs for fishers (including through products like insurances, micro-pensions, educational loans, and the like).

There are several reasons as to why low-income fishers prefer 'informal sector' moneylenders and/or trader merchants or such informal sources among the various supplier stakeholders:

1. Speed of access to loan - (114)
2. Lower transaction cost of access - (136)
3. Assured re-service if loan is paid back properly - (97)
4. Almost any time/night time loan – (82)
5. Locally available and hence, ease of access – (77)

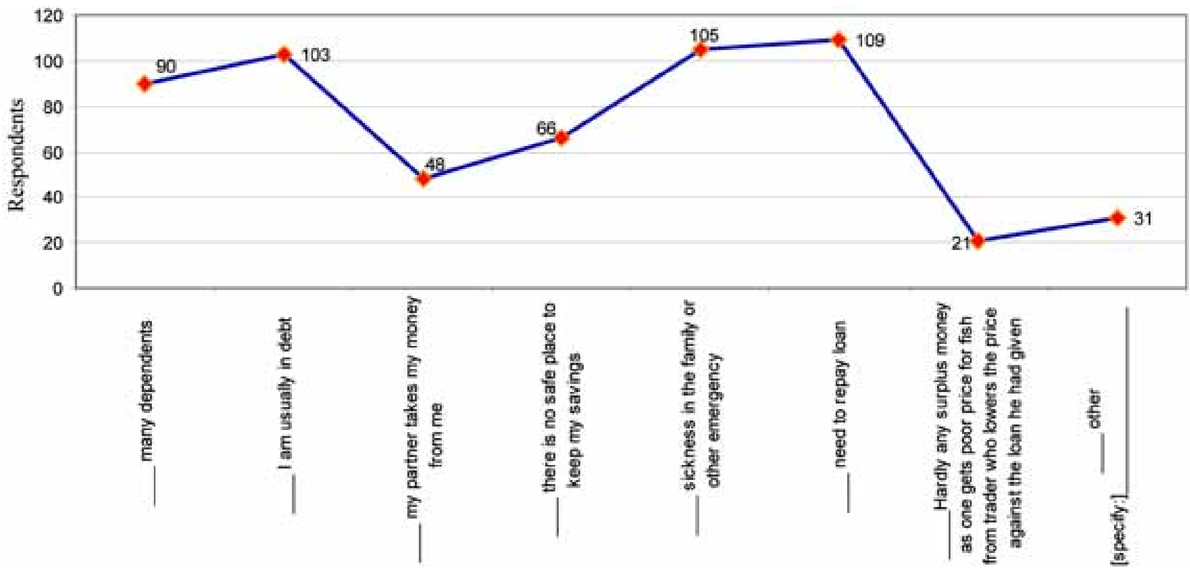
3.5 Savings and Related Financial Services

Financial services such as mutual funds, small savings schemes (postal, Recurring or Fixed Deposits) are not yet very popular. An aspect that needs to be looked into is why fishermen are less likely to save with Financial Institutions and why they have not taken insurance seriously?

Fisherfolk actually save but through mechanisms that we typically do not understand (for example gifts during social functions, etc). Most often, they give loans to friends/relatives for interest (12%-36%) or

[11] *All loan amounts are in Rupees unless specifically mentioned as lakhs of rupees, etc*

Figure 9: Difficulties saving money



even without interest. This seems to depend on the amount required, exigency of circumstances, need, etc. 127 respondents said that they had borrowed from friends or other informal sources some time or other in their life. Very few people had independent bank savings accounts (19) and independent postal savings (22) that they actually operate and use. Some clients were also used to saving for the future by investing bulk amounts in special assets like land (in Chennai - 3). The figure below outlines reasons/ difficulties with regard to saving money, as stated by the respondents.

Actually, the above data are interesting because they suggest that borrowing is used as a form of saving – bulk saving and periodic loan repayment. This coupled with the fact that fishers lend their surplus to friends clearly illustrates the reciprocal and mutually reinforcing relationship between lending and saving.

Figure 10: SIFFS member loan prepayment report

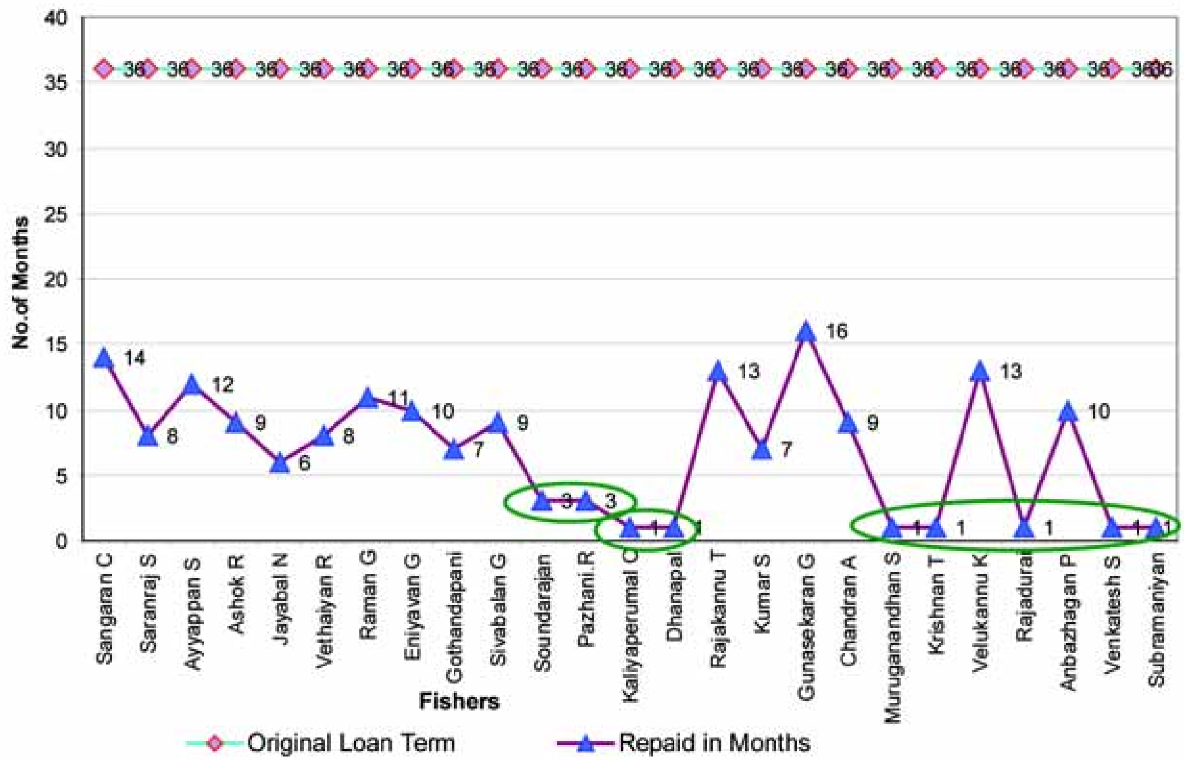
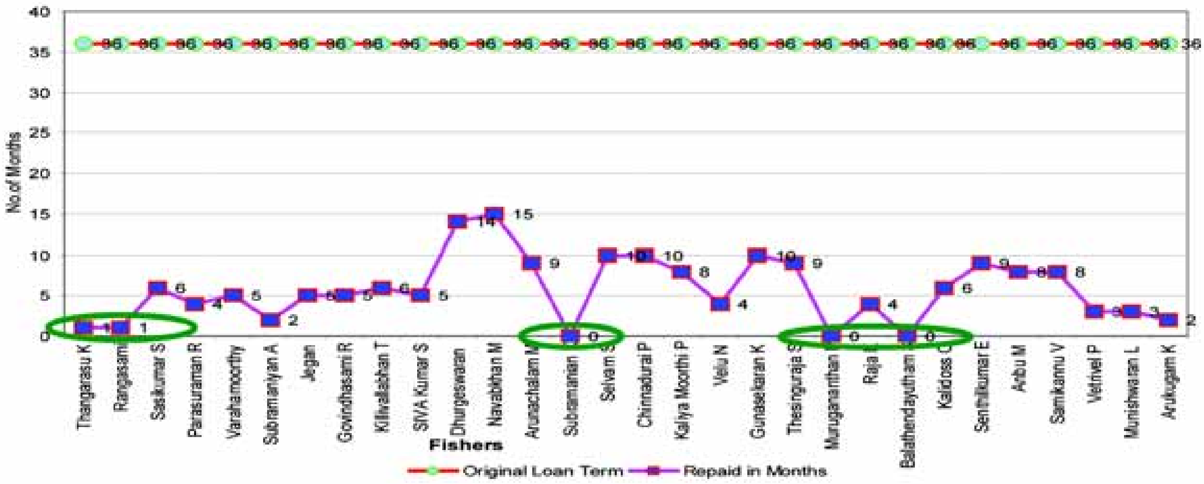


Figure 11: SIFFS member loan prepayment report



3.6 Formal Savings as a Coping Mechanism

SHGs, MFIs, thrift co-operatives and other institutions enable members to deposit their small savings. However, most of these institutions, in the initial years, had only compulsory and non-withdrawable savings of a predetermined fixed amount. Forced savings were also prominent.

Although SHGs encourage members to save with them their surpluses, these savings are strictly not liquid. A member can withdraw only a part of the deposit. Only some institutions offer schemes where the savings are totally voluntary and withdrawable. Deposit schemes with high liquidity, good safety and reasonable returns help clients to use voluntary savings as a coping mechanism.

It was extremely difficult to determine the quantity of savings because of the tendency of these institutions to cite lower savings figures than the actual amount. They did so for fear that future external assistance might be reduced. Nonetheless, some data available from SIFFS/ICNW throws light on this aspect. Please see **Annex 10 and 11.**

Thus, while the need and potential to tap savings exists, the capacity and willingness to save appears to depend on the specific product and distribution mechanism, which must appeal to the fishers and be channelled through appropriate intermediaries. There seems to be some potential to facilitate savings accounts for fishermen/women through a voluntary savings mechanism where liquidity and safety, in that order would be paramount. Returns, which though important, are not the major determining aspect.

At one basic level, fisherfolk (especially fishermen) are gamblers – they live on the hope of tomorrow being their day. It is therefore difficult to motivate them to save. In fact, repayment data of SIFFS (analyzed for this study) clearly shows that catch variability could result in a 36 month loan-after being overdue for 3rd and 4th month – being fully repaid in months 5/6. 12 year data over 6210 loans from SIFFS shows that many production loans are closed by 18 months, almost before 50% of the loan term is over. Hence, attitudinal issues need to tackled for promoting savings. Please see graphs below on huge variability and prepayment of loans as also **Table 7** from SIFFS MIS.

3.7 Insurance Companies

Despite the inroads made by LIC/GIC in providing insurance for fisherfolk, their perception of insurance is strongly negative. This is especially because of past bad experiences with agents and fly-by-night operators. Rebating by LIC agents is also a major issue. As part of the study, the team talked to micro-insurance experts about their experiences and learnings. These are summarized below:

- Insurance products for low-income fisher households (described henceforth as fisheries micro-insurance) are not just normal insurance products with lower premiums and benefits. In particular, selling such fisheries micro-insurance products would require new and alternative distribution mechanisms as well as specilised staff.

Table 7: SIFFS Member Loan Prepayment Report (Sample)

Member				Loan					
Sl. No.	Member ID	Name	Society Name	No.Of. Loans Taken	Principal Out standings	Last Loan Amount (Days)	Avg. Time to settle Over dues	Original Loan Term	Repaid in Months
		No.Of. Members:	120 Total:	154	0	1,648,800		36	
1.	10001	Arumugam P	Tharangampadi	3	0	25000	104.4	36	21
2.	10009	Ilayaraja C	Tharangampadi	3	0	25000	92.83	36	25
3.	10010	Ramamoorthy I	Tharangampadi	2	0	11000	120.33	36	31
4.	10011	Krishnamoorthy R	Tharangampadi	3	0	25000	138.96	36	21
5.	10015	Soundar Raj S	Tharangampadi	3	0	25000	120.33	36	21
6.	10016	Ezhumalai N	Tharangampadi	3	0	25000	120.33	36	25
7.	10019	Ramesh T	Tharangampadi	3	0	25000	107.11	36	28
8.	10042	Sankar R	Tharangampadi	3	0	25000	120.33	36	5
9.	10048	Thangaraj K	Tharangampadi	2	0	11000	97.75	36	26
10.	10050	Manikkom V	Tharangampadi	2	0	11000	120.33	36	21
11.	10051	Balamurugan	Tharangampadi	2	0	11000	120.33	36	24
12.	10052	Velan	Tharangampadi	2	0	11000	120.33	36	23
13.	10063	Kannan G	Tharangampadi	2	0	11000	162.8	36	29
14.	10068	Pragash P	Tharangampadi	1	0	11000	0	36	5
15.	10071	Murugan P	Tharangampadi	1	0	11000	166.17	36	21
16.	10073	Balaiya T	Tharangampadi	3	0	11000	120.33	36	17
17.	10075	Thangadurai K	Tharangampadi	2	0	11000	94.43	36	20
18.	10076	Pandiyan P	Tharangampadi	2	0	11000	90	36	18
19.	10079	Pugazhenthi	Tharangampadi	1	0	1000	120.33	12	10
20.	10086	Sankar T	Tharangampadi	1	0	11000	29	36	4
21.	10099	Selvamani P	Tharangampadi	1	0	50000	0	36	33
22.	10107	Santhanam K	Tharangampadi	1	0	11000	0	36	5
23.	10112	Rajendiran P	Tharangampadi	1	0	11000	0	36	5
24.	10115	Rajesh G	Tharangampadi	1	0	11000	0	36	5
25.	10133	Radha Krishnan G	Tharangampadi	1	0	11000	45	36	3
26.	10147	Murali S	Tharangampadi	1	0	11000	0	36	5
27.	20004	Arumugam E	Chinnangudi	1	0	3000	0	36	16
28.	20005	Kaliyamoorthy K	Chinnangudi	1	0	11000	0	36	27
29.	20015	Raman A	Chinnangudi	1	0	4800	0	36	23
30.	20018	Sundarakumar S	Chinnangudi	1	0	1000	0	36	26
31.	20023	Kuppurethinam V	Chinnangudi	1	0	11000	0	36	25
32.	20028	Karuppan P	Chinnangudi	1	0	5500	0	36	20
33.	20040	Velu P	Chinnangudi	1	0	5500	0	36	27
34.	30001	Rajendran S	Arcottuthurai	1	0	1500	0	36	9
35.	30003	Pakkirisamy G	Arcottuthurai	1	0	1500	150	36	7
36.	30006	Ramu N	Arcottuthurai	1	0	3000	150	36	23
37.	30010	Sivananthan R	Arcottuthurai	1	0	3000	150	36	12
38.	30014	Subramanian S	Arcottuthurai	1	0	5000	150	36	7
39.	30027	Chidamparam T	Arcottuthurai	2	0	25000	0	36	15
40.	30033	Murugaiyan V	Arcottuthurai	2	0	25000	0	36	15
41.	30037	Saravanan S	Arcottuthurai	1	0	11000	0	36	11
42.	30041	Thunaivan E	Arcottuthurai	1	0	6500	79.67	36	26
43.	30042	Thirumoorthy R	Arcottuthurai	1	0	11000	0	36	14
44.	30061	Kuppusamy	Arcottuthurai	1	0	11000	64.33	36	16
45.	30067	Rajaram	Arcottuthurai	1	0	11000	0	36	16

- Specialised micro-Insurance departments may be required to create these alternative mechanisms, as sectoral expertise is required.
- These specialized departments must be given latitude to be entrepreneurial and innovative, given the nature of the fisheries sector
- The insurance business requires trust from policyholders, especially among the fishers.
- Much of the market is unaware of insurance. However, for those that are aware, their perspective has been tainted by poor previous experiences of insurance. Teaming up with a trusted local partner (like SIFFS) can help to create policyholder trust in the insurer.
- It is expensive to set up a separate organisation to deal only with insurance for the low-income fisheries market. Poor people can only afford a low level of insurance, which means that they pay small premiums. Small premiums cannot cover the costs of market insurance, do underwriting, collect payments, follow-up on delayed payments, verify and process claims, comply with regulation and reporting requirements, etc. Premiums that are affordable to the poor cannot cover the operating costs of serving a great number of individual clients. It is most likely impossible to make insurance services viable unless they are integrated into other, ongoing operations to reduce costs.
- The distribution of the insurance service will in most cases have to be done through an existing organisation, preferably one that already manages financial transactions with the working fishers, including MFIs, cooperatives and producer organisations but it must be managed independently.
- Distribution is critical to success of such insurance as fisheries has tremendous dependence on local and specialised intermediaries
- The front end processes closer to customer must be done by intermediaries and/or peers with experience in fisheries
- Cost reduction in insurance delivery has to be a continuous effort and technology and outsourcing of functions to intermediary is critical.
- The insurance company must establish a mutually beneficial business relationship with its distribution channels. The intermediary organisations (cooperatives and others) should receive financial incentives (commission) for achieving predetermined and mutually agreed sales targets. The cooperative employees that promote and sell the fisheries microinsurance product, and the person in the cooperative responsible for the overall fisheries microinsurance promotion, should also receive incentives.

Apart from the above, insurance in the fisheries sector, especially for assets, requires certain critical aspects like registration of boats, Unique IDs for them etc- all of which requires regulatory attention. These aspects are discussed in the recommendation section.

3.7.1 Summary – Demand Aspects

Thus, as noted in the above sections, financial deepening is the need of the day. There are a range of financial services (and not just production loans) that the fishermen and fisherwomen need. Among unmet needs, the following appear to be critical: Education/Emergency loans, need for safe and liquid savings facilities, and insurance products for life cycle events, emergencies and setbacks. Health insurance is very critical as even one occurrence of a health problem often breaks an entire family's resilience. Many others were also keen on a retirement fund. The possibility to introduce a pension scheme is quite good in some areas; UTI Mutual Fund indeed has a product that can be adapted. Most importantly, it includes flexible contributions, which are very critical. Micro-leasing could also be explored for Coolies, with the option of buying the equipment at a later stage. **Figure 12** maps the needs across fisherfolk. Table 8 highlights analysis from PRA exercise.

The rankings across segments have been mapped in **Figure 13** given in next page.

Figure 12: Marine Vs Inland Fisheries, Share in Production

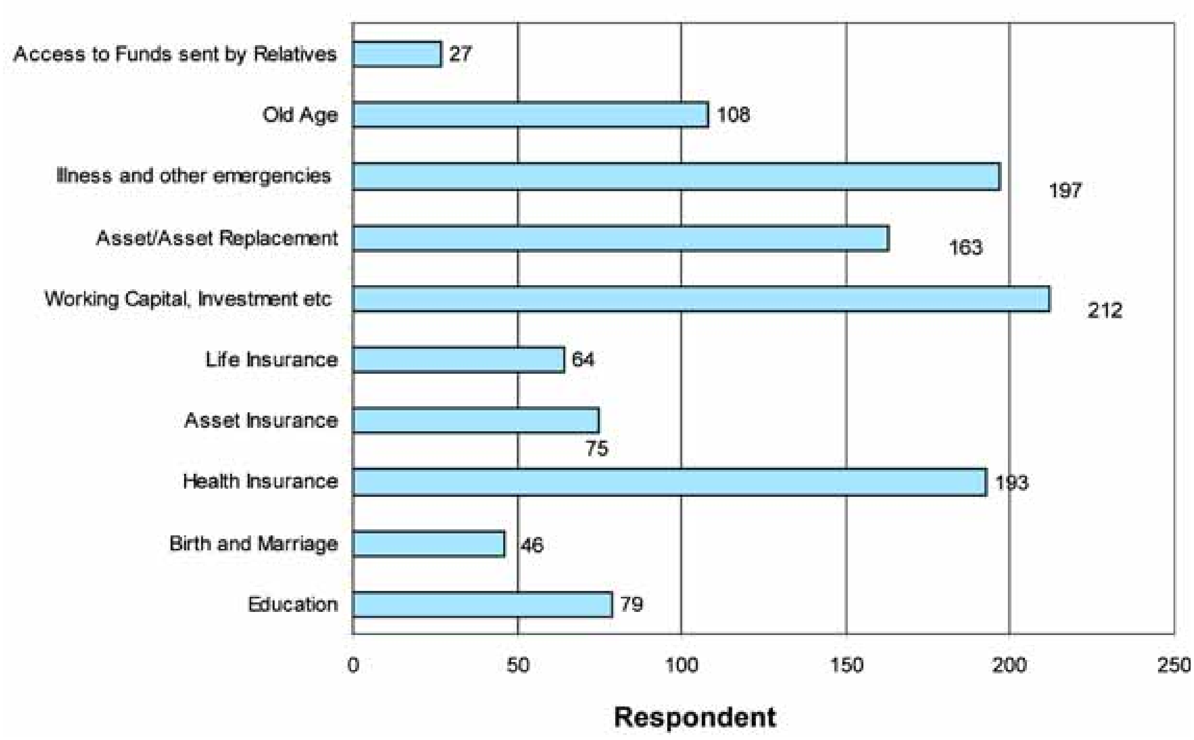


Table 8: General Product Design and Perceived Usefulness of Products:

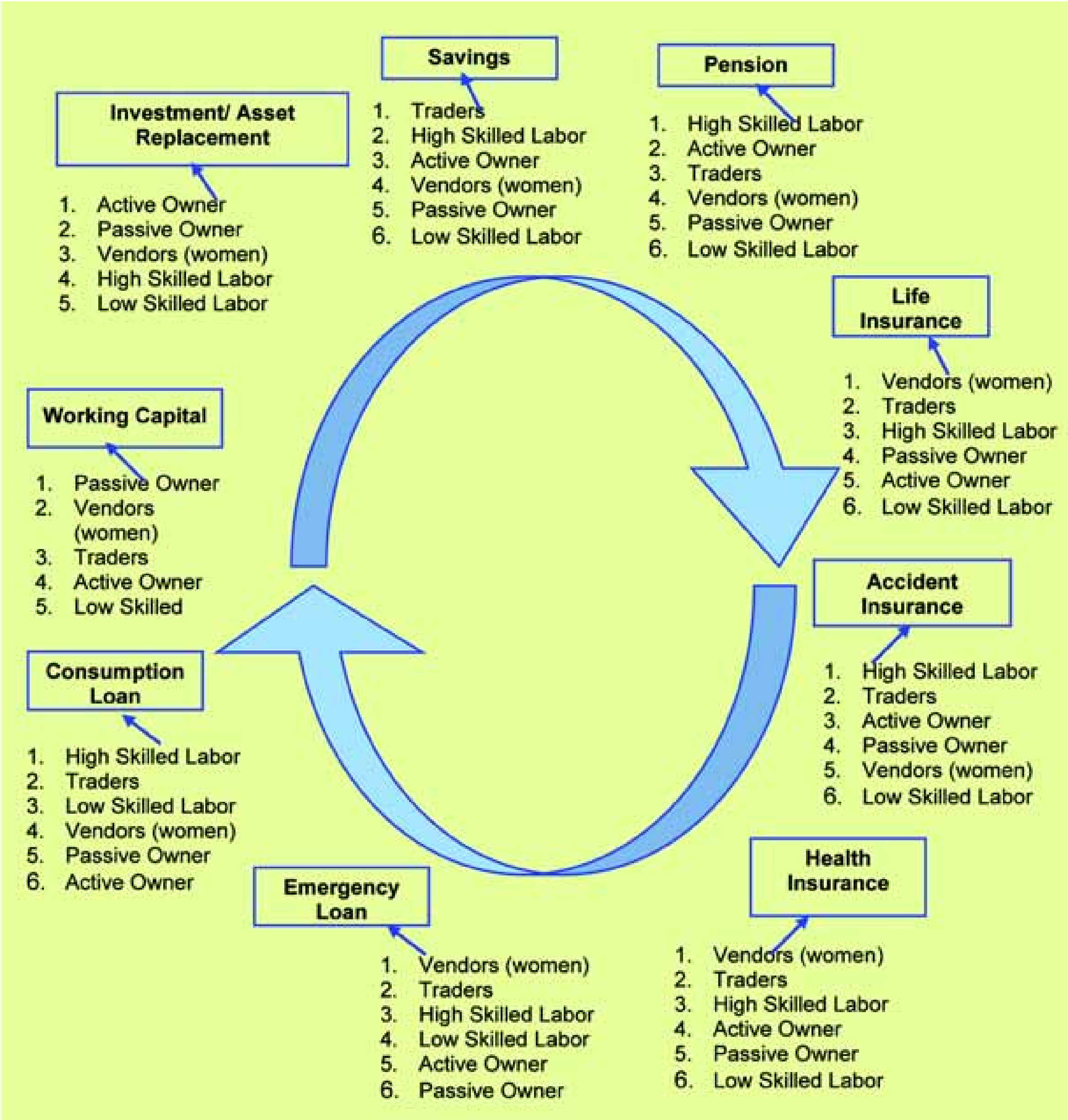
Segments	Production credit		Consumption Loan	Emergency Loan	Health Insurance	Accident Insurance	Life Insurance	Pension	Sav-ings
	Investment/ Asset Replace-ment	Working Capital							
Active Owner	4.74	4.73	3.26	4	3.45	2.33	2.68	2.47	1.91
Passive Owner	4.72	4.71	2.52	3.26	2.11	1.69	1.82	3.35	2.36
High Skilled Labor	4.56	4.75	4.2	3.5	4.17	2.76	3.29	2.65	2.40
Low Skilled Labor	4	4.62	4.52	4.74	3.85	2.38	3.44	2.73	3.03
Vendors (women)	4.69	4.59	3.26	3.92	2.63	3.15	1.93	2.17	3.64
Traders	2.52	4.68	4.63	4.26	2.32	1.91	1.89	2.39	2.32
5= Must Useful 1= Least Useful									

3.8 Risk Faced by Fisherfolk

Diminishing returns from fishing is being felt by almost all the fishermen interviewed and this is the biggest risk. One of the stated reasons is that post-tsunami catch is getting lower. While the tsunami and other natural phenomena like monsoons may have had a significant impact on daily catch, it is also evident that there is crowding of fishing boats, resulting in lower returns on capital employed. The risk of uncertain and lower returns from a trip was mentioned as another primary risk. In the perception of fishers, this has been growing over the last few years

In Tuticorin, while fishermen associated with the federation did not take any loans from fish traders and their sale was through the local federation, a review of the federation's books reveals that credit dues from traders ran into several months of receivables. Even the federation is unable to collect funds from the traders. It t was said that if they forced the trader to pay up, they might be unable to sell in the local market.

Figure 13: Perceived usefulness of products: PRA results ranking



This is one of the most significant examples of the extent of trader control on local markets/fishermen. The question to ask here is, are traders using fisher's money (credit) as working capital? The associated risk of default by traders to societies was mentioned as a risk, although the clients had tremendous confidence in SIFFS – both its ability to protect them as well as recover dues from traders/merchants

Other risks mentioned were:

1) Life at Risk (LAT): Since they have to venture farther out to the sea, they often reach international waters where risk to life is high;

2) Trawler Risk: Another risk is from trawlers of large shipping companies which sweep the sea beds using aggressive fishing methods not suited for tropical fisheries; and

3) Equipment Loss Risk: Tawlers damage nets of smaller crafts. Propellers of ships also damage nets. Collisions damage boats and engines and cause accidents.

4) Trader Risks: Vendors, hawkers and traders brought up the risks of damage, perishability, inability to sell, business losses because of inability to collect sales dues, physical risk from police/govt and such issues.

Box 2: The Perception of Risk by Fishers

The risks the fishers face are of three types - human risk involving fishers and employees like coolies, risk to business assets (boats, engines etc) and market -related business risks. Information on the likelihood of risk occurrence, the likely impact of such a risk on respondents and their businesses, how frequently the respondent worries about the risk and whether insurance has been/can be availed to manage the risk, was ascertained from the respondents.

- Human risk is any mishap to the fishers and his/her employees in carrying out the activity. The risk can be health hazard, accident and loss of life.
- The business assets are the physical assets employed in the enterprises such as, boats, nets, engines, tools and stock in trade. The risks that are perceived by the respondents include complete / partial loss due to theft/ riot/ flood and natural calamities, repair of assets, damage due to perishability etc.
- While carrying on any enterprise, there are certain risks which the fishers face from the different factors in the market environment. These risks can be customers related, market related and due to technological changes.

Given a specific category of enterprise, there are some risks which are perceived as highly likely to occur and hence are considered as most risky. The ranking of the risks has been carried out depending on the number of respondents who perceived the risk.

Type of Activity[12]	Highly likely/certain to occur and most risky	Highly likely to occur and second most risky	Likely to occur and third most risky
Vending	• Health (23%) • Accident (16%) • Market related (19%) • Bad debts (12%) • Spoilage (12%)	• Repair (9%) • Natural calamities (7%) • Theft/Fire/Riot (7%)	• Loss of life (5%)

Type of enterprise	Highly likely/ certain to occur and most risky	Highly/ likely to occur and second most risky	Likely to occur and third most risky
Capture Fisheries	• Health (23%) • Repair (27%) • Natural Calamities (21%) • Market related (16%)	• Accident (12%) • Loss of life (11%) • Bad debts (9%)	• Theft/Fire/Riot (7%)

3.9 Lifecycle Events, Setbacks and Emergencies and Associated Expenditure

Clients/groups were also probed about life cycle events, setbacks and emergencies that they had faced (as a household) over the last 3 – 5 years. The major expenditures associated with these for the different households in the last 3 – 5 years were also gathered. The primary objective was to understand the type of events, setbacks, and emergencies that these households experienced, the effect of these on the households' finances, other impact and most importantly, naturally used coping mechanisms.

Table 9: The major life cycle events are:

Marriages	Of daughters, son, other family members
Functions	House-warming, festivals, etc.
Education and securing jobs	School/college/diploma/Professional courses for children, etc.
Housing	Inclusive of construction, repair, purchase, etc.
Other	Sending son to Dubai, etc.

[12] *Numbers are not mutually Exclusive*

Table 10: The key setbacks/ emergencies are:

- Maternity
- Rain/Flood/Cyclone/Tsunami etc
- Fire
- Accidents/Death, Riots, Loss of fishing equipments
- Loss of Business Assets
- Loss of Household Assets
- Health Problems and Effects
- Accident, Disability
- Death (natural)
- Desertion, Divorce, Separation

Table 11 provides a summary analysis of major lifecycle events and emergencies and the coping mechanisms utilized by clients.

Table 11: Life Cycle Events (Not Exhaustive)

Major Event	Coping	Expenditure Range
Marriages of daughter/son/ other(s)	• Borrowed from Friends and Relatives • Utilized Savings from Various Sources • Sold Assets • Used Chit Fund • Borrowed Loan from MFI/SHG/PO/Cooperative • Borrowed Loan from Merchant/Money Lender • Borrowed from Other Sources • Others-used Son's Dowry for Daughter	Ranged from Rs.9000 to 1,39,000
Functions	• Borrowed Loan from MFI/SHG/PO/Cooperative • Sold Gifts to Repay Loan • Took Loan from Money Lender/Merchant • Borrowed from Friends and Relatives • Borrowed from Other Sources • Mortgaged Jewellery • Other(s)	Rs. 3600 to Rs. 95, 000
Education	• Borrowed Loan from Money Lender • Utilized Savings from Various Sources • Borrowed from Friends and Relatives, Mortgaged Jewellery • Other	Rs. 2000 to Rs. 26, 000
Housing	• Utilized Savings from Various Sources • Took Housing Loan from society • Borrowed Loan from Money Lender • Borrowed Loan from MFI/SHGs/Cooperative/PO • Borrowed from Other Sources • Borrowed from Friends and Relatives • Other	Rs. 4800 to Rs. 2,65,000

It is interesting to note that respondents placed greater emphasis on all events other than education. This again indicates the priorities of the fisher community. But it could also reflect the fact that education generally sets a family back much less than either housing, marriage or other functions.

Figure 14: Major life events and range of expenditures

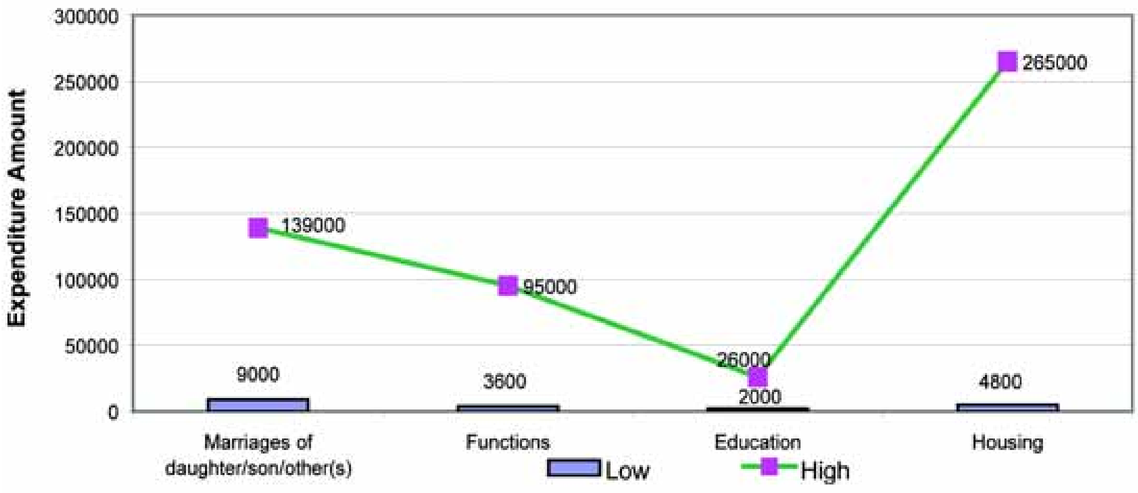


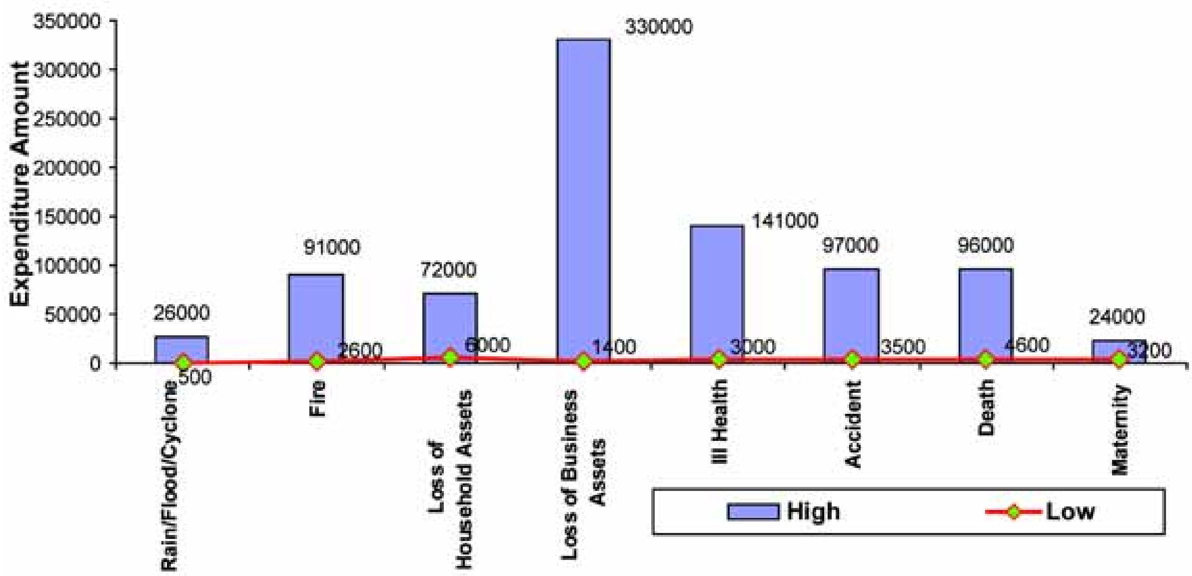
Table 12: Setbacks/Emergencies

Major Event	Coping	Expenditure Range
Rain / Flood / Cyclone (Tsunami was documented separately but this was not a year on year event)	• Government Assistance • NGO Assistance • Borrowed from SHG/MFI/PO/Cooperative • Borrowed from Other Sources • Borrowed from Friends and Relatives • Used Insurance • Mortgaged Jewellery • Borrowed from Money Lender/Merchant • Other	Ranged from Rs. 500 to 26,000
Fire (Urban slums) and crowded fishing harbours, storages of nets, engines and fuel	• Borrowed Loan from Money Lender • Borrowed Loan from MFI/SHG/PO/Cooperative • Borrowed from Friends and Relatives • Borrowed from Society for Home • Borrowed from Bank • Utilized Savings from Various Sources • Insurance • Borrowed from Money Lender/Merchant • Other	Rs. 2600 to Rs. 91, 000
Loss of Household Assets	• Borrowed Loan from MFI/SHG/PO/Cooperative • Borrowed from Other Sources • Utilized Savings from Various Sources • Borrowed from Friends and Relatives • Mortgaged Jewellery • Borrowed from Money Lender/Merchant • Other	Rs. 6000 to Rs. 72, 000
Loss of Business Assets Due to various causes - Fire, theft, flood, rain, cyclone and monsoon and other reasons like market factors, price fluctuations and fraud by associates, etc.	• Borrowed Loan from Money Lender/Merchant • Borrowed Loan from MFI/SHG/PO/Cooperative • Utilized Savings from Various Sources • Mortgaged Jewellery • Borrowed from Friends and Relatives • Other	Rs. 1400 to Rs. 3, 30, 000

Contd...

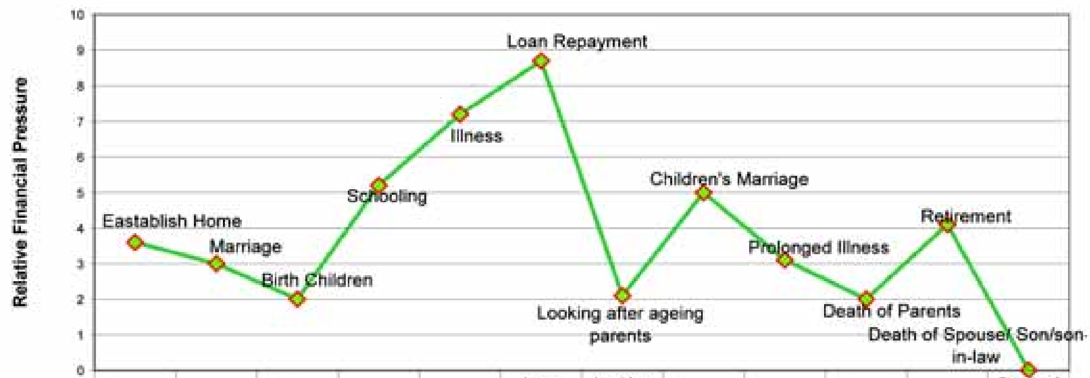
Major Event	Coping	Expenditure Range
Ill Health	• Availed Insurance through MFI • Used Chit Fund • Borrowed from Friends and Relatives • Borrowed Loan from MFI/SHG/PO/Cooperative • Borrowed Loan from Money Lender/Merchant • Borrowed from Other Sources • Family Members Helped • Brother Helped • Mortgaged Jewellery • Sister Helped • Utilized Savings from Various Sources • Other	Rs. 3000 to Rs.1,41, 000
Accident	• Utilized Savings from Various Sources • Borrowed Loan from Money Lender/Merchant • Borrowed Loan from MFI/SHG/PO/Cooperative • Borrowed from Other Sources • Mortgaged Jewellery • Sold Assets • Used Chit Fund • Used Medical Insurance • Availed Insurance from MFI • Mortgaged Jewellery • Other	Rs. 3500 to Rs. 97, 000
Death	• Utilized Savings from Various Sources • Borrowed Loan from Money Lender/Merchant • Borrowed Loan from MFI • Used Chit Fund • Used Social Security Insurance/Death Relief Scheme • Borrowed from Friends and Relatives • Mortgaged Jewellery • Other	Rs. 4600 to Rs. 96,000
Maternity	• Utilized Savings from Various Sources • Borrowed from SHG/MFI/PO/Cooperative • Borrowed Loan from Money Lender/Merchant • Borrowed from Friends and Relatives • Mortgaged Jewellery • Other	Rs. 3200 to Rs. 24,000

Figure 15: Major setbacks/ emergencies



To summarize various setbacks and emergencies. Risk impact can be very high (loss of business assets, ill health) or high (accidents, death, fire in the case of urban slums). Impact from severe rain, flood or cyclone may be high[13] but it usually inspires relief from the government and other stakeholders. While the above are data based on the survey, PRA results offer some very interesting insights on what causes financial pressure

Figure 16: Composite PRA analysis of life cycle events, emergencies and setback

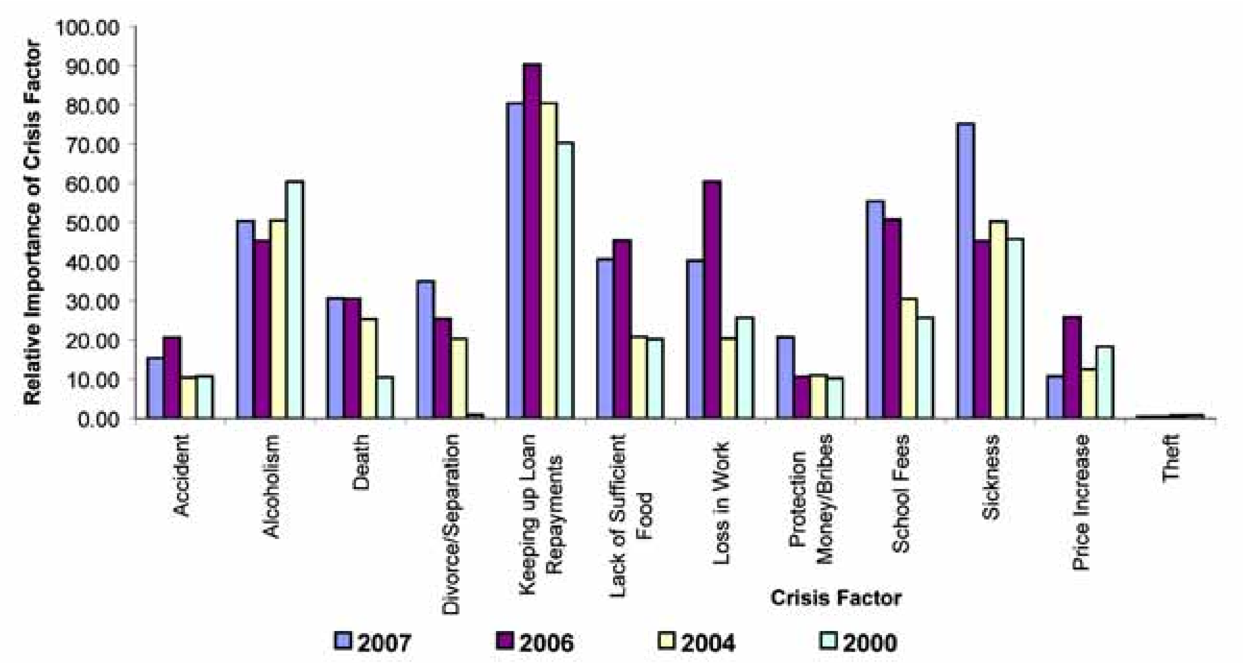


	Eastablish Home	Marriage	Birth Children	Schooling	Illness	Loan Repayment	Looking after ageing	Children's Marriage	Prolonged Illness	Death of Parents	Retirement	Death of Spouse/ Son/son-in
Average	3.6	3	2	5.2	7.2	8.7	2.1	5	3.1	2	4.1	0

As Figure 16 suggests, loan repayment is a very high source of financial pressure as are issues like illness, children's marriage and schooling. Schooling causes high pressure not because of the money parents need to spend, but because of the urgency of payment. The social impact of non-payment of fees was also perceived to be very high.

The time series analysis recall share some interesting data. Te top three financial crisis factors recalled were loan repayments, sickness and loss in work. Other aspects that came up included alcoholism and school fees

Figure 17: Composite analysis of crisis factors (from Time series PRA analysis)



[13] *Tsunami was a freak event and certainly an outlier. This data is however available but the recall data is quite contradictory and so, has been excluded.*

A set of products suggested by clients and other stakeholders for the life cycle events, setbacks and emergencies is given below:

Life Cycle Event and Setback/Emergency	Suggested Products
Marriage of daughter/son/self/sister/ brother/ sister-in-Law	Endowment Insurance for Children
Functions Deposits)	Variety of Savings Products (especially Recurring
Education	Endowment Insurance for Children
Housing	Loans for Construction/Repair
Rain/Flood/Cyclone/Tsunami	Natural Calamity Insurance
Fire	Asset Insurance
Ill-health	Health Insurance
Accidents	Accident Insurance
Death	Life Insurance
Maternity	Maternity Insurance; Preferably combined with health insurance
Loss of Household Assets	Household Asset Insurance
Loss of Business Assets due to various causes	Business Asset Insurance

3.10 Models in Capture Fisheries and Other Areas

The most dominant model is the one developed by SIFFS. This integrated model has been developed, refined and standardised over 30 years. Matsyafed has adopted the same model and very rapidly spread the same across the whole of Kerala state. An interesting fact is that Matsyafed "cooperatives" are the strongest where the SIFFS societies are also strong. A wide variety of choices and alternatives for people has forced these organisations to perform well to attract and retain fishers as members. In Tamil Nadu, state cooperatives are present in several districts but they need significant attention for revival. SIFFS is now rapidly expanding into Tamil Nadu as are other church-based organisations working in Kerala/ Tamil Nadu.

The SIFFS intervention is multi-faceted and holistic. It includes economies of scale, advocacy for influencing policy, interfaces and inter-linkages. Key areas are right to first sale of fish and release from Indebtedness to merchant moneylenders. Hence, there is an open auction of fish landings, credit support for repairs, replacements (and working capital). The way ahead would be forward linkages of these two critical interventions. That is where SIFFS needs to intervene in greater measure.

3.11 The Basic SIFFS Loans

- Matsyafed has taken some dimensions of these much layered and intricately interwoven interventions and scaled them. The positive side is that every fish worker in Kerala is today is covered under producers organisations (please see **Box 3** item on Matsyafed)

Aspect	Description
Loan Sizes	55% - 45% Financing and Hypothetication of Assets Financed
Collateral	Not financing 45%-55% is collateral
Loan Term	Medium Term 2-3 years
Repayment	Notional, Monthly Repayment
Frequency	Monthly EMI at Intermediary level Daily collection at fisherman's level
Risk	Safe storage (mechanism) money from Day 1 to Day 30 or so whenever money is being paid
Interest Rate	15% to 16% for Client/Fisherman and < 8-9% for intermediary
Loan Purpose	Working capital, Asset Replacement etc
Interest Method	Declining
Penal Interest	Yes as per need
Loan Range	10000-50000, depending on past catch data
Average Loan Size	35000
Client Education	Transparent Fees/Charges apart from declining balance interest

Box 3: Matsyafed scheme to raise fisherwomen's income[14]

"Envisages jobs for 2,000 fisherwomen and 500 fishermen in 200 units.

KANNUR: Matsyafed is launching a new scheme to enhance the income of fishermen families by offering jobs in the fisheries sector itself to unemployed fisherwomen.

A press release here said on Friday that a value-added fishery production and marketing scheme would be launched by the Matsyafed under the Swarnajayanthi Grama Swarozgar Yojna (SGSY).

The release said that fishermen in the State were catching an estimated five lakh tonnes of fish every year and their catch had high demand not only in domestic market but also in international market. Though the State accounted for no less than 17 per cent of foreign currency that the country earned from export of fish products, the plight of fishermen families in the State could not be worse, it said.

The proposal for the scheme with an estimated cost of Rs.1127.15 lakh, which had been submitted to the Central and State Governments, envisaged employment of 2,000 fisherwomen and 500 fishermen in 200 value-added fish production units and 50 marketing centres to be started in nine coastal districts in the State. It also envisaged supply of quality fish and fish products at fair prices, the release said.

It said the project cost included Rs.87.5 lakh for training, Rs.418.5 lakh for infrastructure development, Rs.461.15 lakh as working capital and Rs.75 lakh for market promotion.

The first instalment of Rs.152.24 lakh of the Central allocation for the project had already been handed over to Matsyafed. In the first phase, works estimated at Rs.450.8 lakh were being implemented with allocation from the State Government, financial assistance from financial institutions and beneficiary contributions, the release said.

As many as 419 members of 50 self-help groups of beneficiaries selected from 58 fishermen welfare cooperative societies in Thrissur, Malappuram, Kozhikode, Kannur and Kasaragod had been given training at the Integrated Fisheries Project in association with Kudumbasree. Each of the production and marketing units with trained members would be allocated Rs.3,18,080 and Rs.6,07,000 respectively.

The production units would be offered Rs.89,087 as subsidy, Rs.57,037 as share capital and Rs.95,665 as loan, while the marketing units would receive a subsidy of Rs.1,59,650, share capital of Rs.2,02,500 and loan of Rs.78,500, the release said".

- In Tamil Nadu, the state has not made such massive interventions as yet. But it is now very keen and serious about expansion of coverage and quality of service. The erstwhile IFAD project - Magalir Thittam (1989) did partner Indian Bank – worked with women in post harvest fisheries (vending) in Ramnad almost 20 years ago. Many of today's well known MFIs in Tamil Nadu have some origins in this program.
- Well-known institutions like Dhan Foundation, ICNW, Shanthi Dhan and several others have intervened with fishers/vendors and others through somewhat standard microfinance methodology. Their dominant work is with women who are engaged in post harvest fisheries, using traditional micro-finance approaches, although they are increasingly intervening with others as well.

Box 4: The DHAN Story[15]

Making Fishers Creditworthy

"In Cuddalore district, Tamil Nadu, the Dhan Foundation, an NGO, seeks to sustain the livelihoods of people engaged in micro-business in fish. Some 300 fisher people, mostly women, get support for credit, capacity and infrastructure. So far 56 headload fish vendors, who have been part of micro business groups, have availed of credit assistance for fish vending. They receive capacity training in accounts maintenance, group business management and hygienic fish handling".

---

[14] *Source: Quoted with adaptation from " The Hindu", 23rd December 2006*

[15] *Source: Quoted with adaptation from "Progress Report UNTRS May2007"*

Box 5: Pickles for Chennai - Micro-Enterprises and Fisheries Sector[16]

The UNTRS/FAO is helped some 100 women from a tsunami-affected village in Royapuram, to the north of Chennai, with sustainable long-term livelihoods. (The menfolk are either fishers or fish workers, who don't have a steady income after the tsunami.) The women belong to a self-help group and run a micro-enterprise in fish and prawn pickle production. Forty of the 100 women are into production, the rest in marketing and selling. The unit (three months old at the time of writing) is called the Puthuluga Women's Federation. It has been initiated by the local NGO C-Dot, Support is provided by Action Aid, the "Tamil Nadu Small and Tiny Industries Association - The Friedrich Naumann Foundation" (TANSTIAFNF) and the FAO-UNTRS.

Training for the women has been provided by the Fisheries College and Research Institute, Tuticorin in all the tasks that are needed to prepare the pickles — from peeling garlic and cleaning fish to filling the final paste into the jars.

The unit turns out 250 jars of pickles a day, the goal is 500. For raw material, the women go to the fish market nearby and buy either fish or prawns. This gets transported to the unit, where women clean, cut, debone and disembowel the fish. The cut fish fillet is rolled in spices and dried in the sun for half an hour before cooking. It then gets cooked to the desired level. The final paste is cooled and filled into jars. C-Dot carries out a quality and hygiene assessment every week. .

Says Kalyani, a member of the unit: "I had no work for two months before coming here. I'm happy to work with this unit and earn about Rs 1,250 a month for my family." She also gets about 250 as her share of the profit. After a year, the group will run the unit by itself without external supervision. Says Prasanna George, the present supervisor: "The women here are talented and committed. We all want this unit to be self sustaining."

When this report is going to press after one year, the women group had several ups and downs in business and learnt hard lessons on business. A smaller viable group is now given support to sustain the business.

Coming to traditional microfinance interventions, they appear unsuitable for addressing demands from fish harvesting activities. This is a critical aspect that will be dealt later and is very important from the perspective of financial inclusion of men in fisheries. Hence, traditional microfinance approaches are perhaps more applicable to post-harvest fisheries with women. But here also, pure microfinance logic will not be enough. It needs to be tailored to the fisheries context.

The larger and more complicated problems in post-harvest fishery cannot be addressed just through credit finance for women, even as the economic/social divide between coolies and owners cannot be sorted out by collective crew ownership of fishing equipment!

State interventions are welcome and desirable – especially if civil society interventions are not able to scale up. The State has great outreach. Examples from many contexts tell us what good state interventions can do. But the state should ensure level playing fields, accountability, checks and balances and social audit of responses.

On the flip side, state interventions tend to monopolise practices, using state power and resources to drive development in certain directions — but without the willingness or ability to address negative factors. Cheaper credit, loan waivers (!!!), and indiscriminate subsidies on production loans have driven small-scale fisheries in certain unintended and undesired directions – mainly in Kerala and also in Tamil Nadu. Some of these aspects are discussed in subsequent sections.

[16] *Source: Quoted with adaptation from "Progress Report UNTRS May-2007"*

4 Characteristics/Dynamics of the Sector and Implications for Finance

Open Access/Common Property/Renewable Resource Base have made the financial viability of the capture fisheries sector a **Zero Sum Game.** Short-term and export market orientation and introduction of inappropriate capital intensive technologies – such as trawl and purse seine fisheries that dominate the industrial/mechanized/ ”modernized” fishery sector – have fast depleted resources, endangered the resource base, facilitated unhealthy competition in inshore waters, led to over-capitalization and made capture fisheries less viable. Result: too many people are chasing too little fish at increasing cost.

Problem Areas

As the output remains the same or is declining, associated costs and inputs have increased. Further, inputs costs are going up (prices determined by global markets). Another major problem is the increasing loss of control of the community over pre-harvest (net making, crafts) and post- harvest activities – fish vending is a stigmatized occupation and younger educated women opting out. Opportunities for broad-basing and diversifying the economy are limited. Hence, dependence on the fish resource base is almost total.

Implications of this are: poor risk spread, no proper response to variability/seasonality, and increasing unemployment, underemployment and concealed unemployment. These aspects are worse after the tsunami. Fishing businesses — purchase and upkeep of boats, engines, nets - need ongoing investments to be sustainable. But after the tsunami, a number of fishermen seem to have been provided fibre boats/ engines without assessing earning potential. This has aggravated over-capitalization and lowered returns. Fishermen believe that catches have dropped after the tsunami. But this could be the result of too many boats operating in the same area and bringing back very little fish. (Please see Tables 13, 14 and 15) Illustrate the economics from different geographic areas.

4.1 Segmentation of Small-Scale Fishing Communities

The main players in small-scale fishing communities are:

- Merchant Money Lenders
- Owner-Workers
- Owners
- Coolies

While the system of profit-sharing varies from place to place, the most vulnerable are the coolie workers in any fishing community. They hardly enjoy any access to formal institutional credit. In some societies of SIFFS, the crew can also save money and avail of smaller loans for consumption purposes during festivals. But in most societies, coolies take no part in the activities and financial transactions of the society. But the hard fact is that they constitute >70% of the community and financing them is a CRITICAL NEED for the larger good of the sector. The economics for coolies are set out on Tables 13, 14 and 15.

The cleavage between merchant-money lender/craft owners on the one side and the coolies on the other, is likely to deepen into sullen resentment and/or irresponsible alcoholism. During post-tsunami interventions, this sharp divide was very clear. The simplistic solution attempted to make coolies owners (through group ownership!) has backfired. More imaginative and creative interventions are required, such as innovative financing. These are addressed in the recommendations section, with the thrust being on several special products for them.

The graphs on Pallithottam (**Annex 8)** clearly illustrate the financials of Owners Vs Coolies

Table 13: Financial Inflow/Outflow Statement of Pallithottam

Typical Pallithottam Unit (Financials)			OWNER CUM WORKER (Pallithottam) Financials			
Average Catch per year (reported)	350000		Annual Earning			129500
Actual (assuming 20% is not recorded)	70000	420000	Engine	70000		
Common Expenses (6%) of Actual	-25200		Life of Engine (years)	4		
Oil @ 7000/month	-84000	-109200	Salvage Value	15000		
Shareable Income		310800	Depreciation		13750	
Share Owner (30%)	93240		Interest Expenses		3267	-17017
Share Crew (70%)	217560		Boat	80000		
Crew Earning/Year (1/6 of 70%)		36260	Life of Boat (Years)	7		
Crew Earning/Month		3022	Salvage Value	20000		
Owner-Worker Earning/ year (30%+ 1 share)		129500	Depreciation		8571	
Owner cum Worker Earning/Month		10792	Interest Expenses		5600	-14171
			Nets (at least 6 types)	125000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		25000	
			Interest Expenses		5833	-30833
			Additonal Expenses			
			Repairs for engines/Boat		7000	
			Annual Bonus for Crew		2000	
			Interest on Crew Advances(Rs.25000 *24%)		6000	-15000
All expenses on one Unit/Year	-25200		Total Owner Expenses			-77021
	-84000		Net Annual Earning			52479
	-77021	-186221	Net Monthly Earning			4373
Average Expense/Day across 200 days		-931	Income Difference (Owner/ Crew) Monthly			1352
			Income Difference (Owner/ Crew) Yearly			16219

Table 14: Financial Inflow/Outflow Statement of Vaddy

Typical Vaddy Unit (Financials)			OWNER CUM WORKER (Vaddy) Financials			
Average Catch per year (reported)	350000		Annual Earning			116550
Actual (assuming 20% is not recorded)	70000	420000	Engine	70000		
Common Expenses (6%) of Actual	-25200		Life of Engine (years)	4		
Oil @ 7000/month	-84000	-109200	Salvage Value	15000		
Shareable Income		310800	Depreciation		13750	
Annual Share Owner (3/6)	77700		Interest Expenses		3267	-17017
Annual Share Crew (I of 8 shares)		38850	Boat	80000		
Crew Earning/Month		3238	Life of Boat (Years)	7		
Owner-Worker Earning /3 shares)		116550	Salvage Value	20000		
Owner cum Worker Earning/Month		9713	Depreciation		8571	
			Interest Expenses		5600	-14171
			Nets (at least 6 types)	125000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		25000	
			Interest Expenses		5833	-30833
			Additonal Expenses			
			Repairs for engines/Boat		7000	
All expenses on one Unit/Year	-25200		Annual Bonus for Crew		2000	
	-84000		Interest on Crew Advances (Rs.25000 *24%)		6000	-15000
	-77021	-186221	Total Owner Expenses			-77021
Average Expense/Day across 200 days		-931	Net Annual Earning			39529
			Net Monthly Earning			3294
			Income Difference (Owner /Crew) Monthly			57
			Income Difference (Owner /Crew) Yearly			679

Table 15: Financial Inflow/Outflow Statement of Kanyakumari

Typical Kanyakumari Unit (Financials)			OWNER CUM WORKER (Kanyakumari) Financials			
	400000		Annual Earning			213120
Actual (assuming 10% is not recorded)	80000	480000	Engine	90000		
Common Expenses (6%) of Actual	-28800		Life of Engine (years)	4		
Oil @ 9000/month	-96000	-124800	Salvage Value	20000		
Shareable Income		355200	Depreciation		17500	
Annual Share Owner (50%)	177600		Interest Expenses		4200	-21700
Annual Share Crew (I of 5 Shares)		35520	Boat	100000		
Crew Earning/Month		2960	Life of Boat (Years)	7		
Owner-Worker Earning (50%+1/5 share)		213120	Salvage Value	25000		
Owner cum Worker Earning/Month		17760	Depreciation		10714	
			Interest Expenses		7000	-17714
			Nets (at least 6 types)	100000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		20000	
			Interest Expenses		4667	-24667
All expenses on one Unit/Year	-28800		Additonal Expenses			
	-96000		Repairs for engines/Boat		7000	
	-77581	-202381	Annual Bonus for Crew		1500	
Average Expense/ Day across 200 days		-1012	Interest on Crew Advances (Rs.25000 *24%)		5000	-13500
			Total Owner Expenses			-77581
			Net Annual Earning			135539
			Net Monthly Earning			11295
			Income Difference (Owner/ Crew) Monthly			8335
			Income Difference (Owner/ Crew) Yearly			100019

	Avg Catch Per Year	Total Expenses	Annual Earning (Owner)	Annual Earning (Crew)
Pallithottam	350000	-186221	129500	36260
Vaddy	350000	-186221	116550	38850
Kanyakumari	400000	-202381	213120	35520

Figure 18: Financial inflow/ outflow data analysis of Pallithottam, Vaddy and Kanyakumari

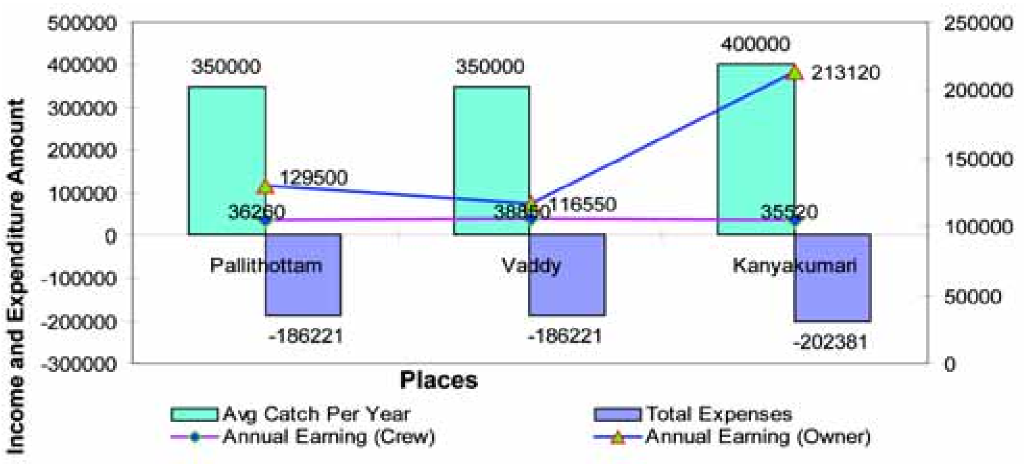


Figure 19: Financial inflow/ outflow data analysis of Pallithottam, Vaddy and Kanyakumari

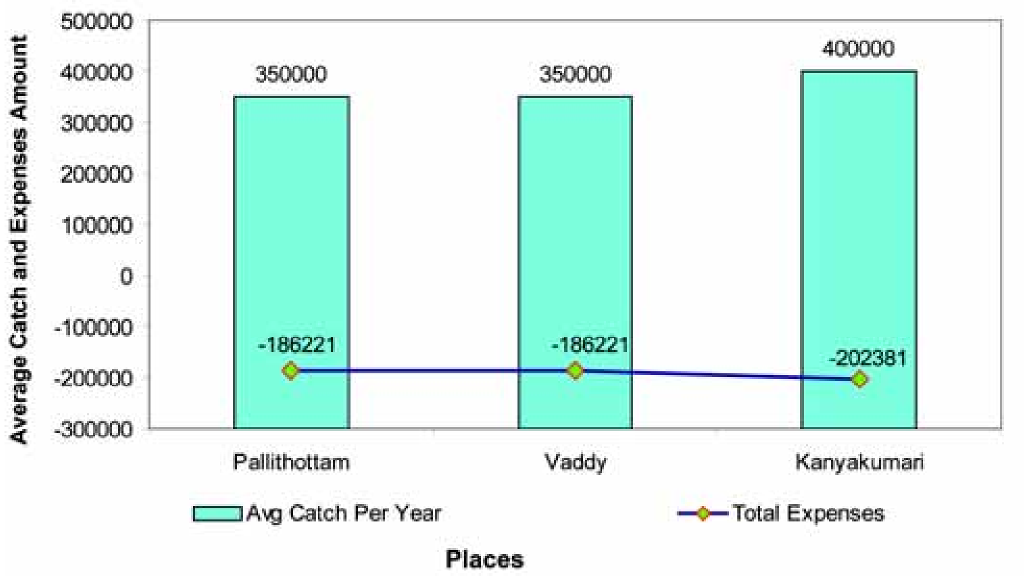
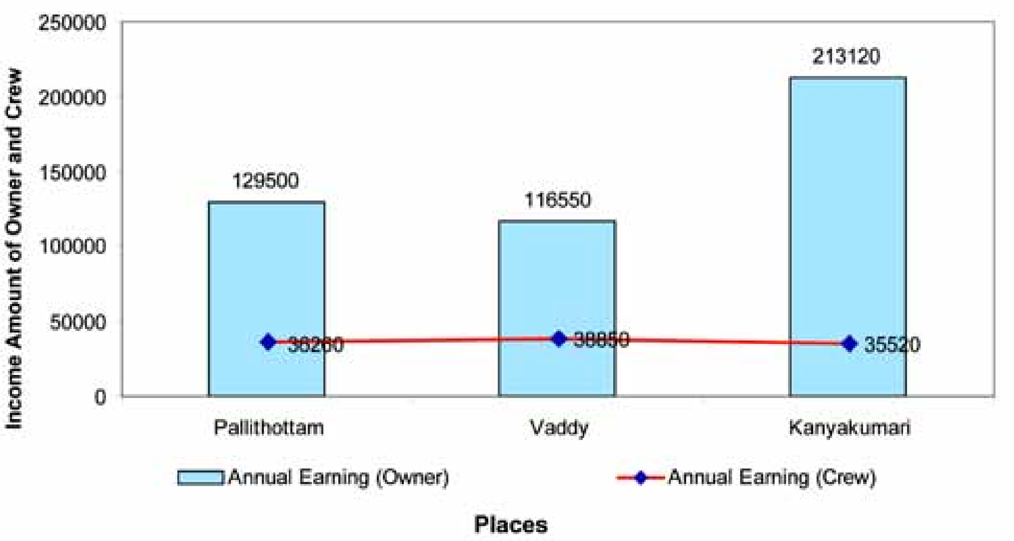


Figure 20: Financial inflow/ outflow data analysis of Pallithottam, Vaddy and Kanyakumari



4.2 Women in Fishing Communities

Industrious women continue to be the mainstay of fishing households. But due to loss of economic control (a total loss in pre-harvest net making, a serious loss that's getting worse and worse in fish sales) – they are losing their space in their families and in the public domain.

By and large, women in fishing communities are better educated than men. More girls complete school, more girls complete graduate/professional courses than boys do. The women are getting increasingly domesticated, and getting addicted to TV serials.

The fish vending operation – apparently there's now a stigma to it. Only the old and the very poor among women go for fish vending. Educated school and college- going children do not want their mothers to continue as vendors. Intervening agencies need to address this question and upgrade fish procurement, processing, storage transport and sales of fresh and dry fish. There are also places for value-addition through processing and through tapping opportunities in the up markets.

But there are some quite enterprising women fish vendors using working capital as high as Rs.1 to 2 lakhs – such women need to be organised further and supported with credit, warehousing, transport and organisation of the market places (proper stalls, kiosks, sale by weight against fixed process, etc). Such women entrepreneurs can even provide jobs to a large number of educated girls and boys and to other women. This aspect needs to be seriously and strongly explored.

Dowry is getting bigger and for a family with two or more girls, this is going to be a big burden. The family must educate the girl and then meet the dowry and marriage expenses and get nothing back. Hence it is critical that the question of jobs for these women is addressed. Educated unemployed girls are more likely to get married to fish workers who are less educated than them and perhaps will also have to pay a larger dowry. Please see **Box 6** below.

Box 6: Declaration of Rights by Fisherwomen[17]

Thiruvananthapuram, Kerala. 8 March 2007

For the past several years, Theeradesa Mahila Vedi, the women's wing of Kerala Swathanthra Matsyathozhilali Federation (KSMTF), Kerala celebrates Women's Day on March 8 with various programmes and activities. This effort was an outcome of the Mahila Vedi to resist exploitative practices and injustices that the fisherwomen were subjected to. The middlemen and moneylenders grab their hard earned income illegally in the markets in different ways. Fisherwomen do not enjoy basic amenities in domestic local markets. The slave-like treatment of fisherwomen and the failure to regard them as part of the working class compels them to organize themselves to assert their rights.

The Declaration of Rights by fisherwomen contained 17 demands. The prelude to the Declaration of Rights was the pledge: *"We, the fisherwomen, are obliged to protect our work and workplace.. To deny our livelihood is equal to the denial of our rights to live. We will jointly resist any attempt to deny justice, attempt to exploit and the inhuman treatment. We hereby swear that we will try our level best to protect the fish resource and will try to ensure the availability of better fish to the consumers through traditional marketing system. We swear that we will fight against those who neglect our basic problems and stand to safeguard our self esteem and pride as a working class"*.

The traditional occupation of fish vending is destroyed by mismanagement of the so-called 'development' process. The incomes earned by the fish vending women are the main source of livelihood for their families. Exploitation of fisherwomen has grown, their rights are increasingly been denied. Their silent suffering is regarded as their weakness. We have to assert our rights as a working class. As an emerging organized working class under the auspices of the Theeradesa Mahila Vedi, from the hitherto unorganized level, we hereby declare the following rights and demands.

[17] *Source: From irenees.net official document (2007)*

Demands:

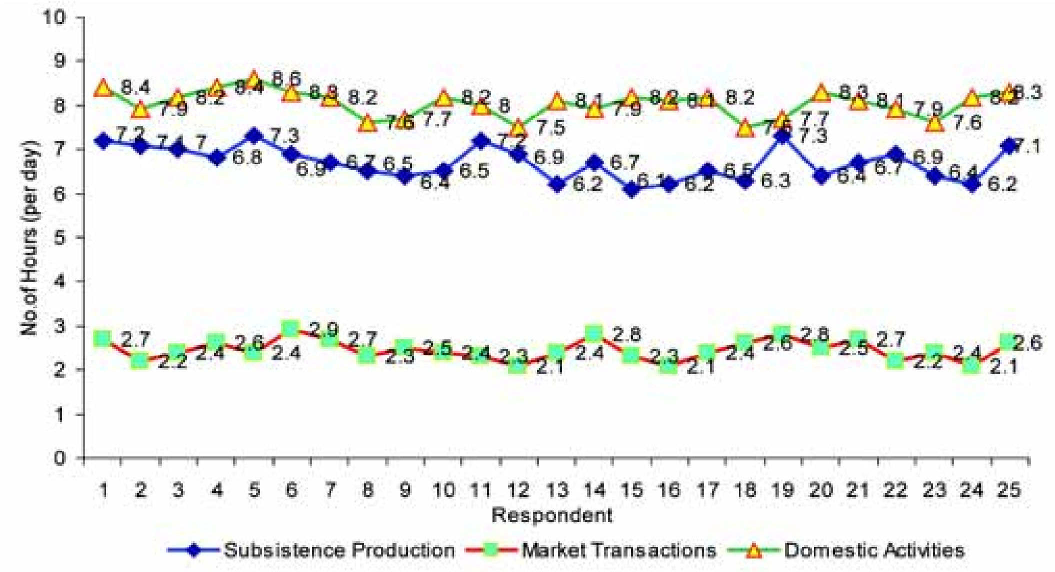
- Provide transportation facilities to fish vending women in all villages.
- Provide a separate bogey in all shuttled trains for fish vending women like that provided by trains in the Kollam-Thiruvananthapuram route.
- Provide financial assistance to fish vending women who meet with occupational accidents.
- Fisherwomen carrying fish loads by themselves must be exempted from market levies.
- Stop illegal collection of money in local fish markets.
- Fix a ceiling for the charges imposed on headload workers by fish vending women. The charges should be collected directly by the headload workers welfare board.
- Provide separate spaces for fish vending women and men in the market.
- Local government bodies should supervise markets. They should collect market levies directly from fish vendors. The levy should be limited to one rupee.
- At least 50% of the market levy collected from fish vendors must be used to improve or modernize markets.
- Introduce savings-cum-relief schemes for fish vending women.
- Construct waiting sheds in fishing harbours for fisherwomen and ensure their safety.
- Ensure reservation for women in Fishermen's Co-operatives and Matsyafed welfare boards.
- Ensure the representation of fisherwomen organisations in the headload worker's welfare board.
- Give representation to fisherwomen in local government bodies.
- Establish residential schools for girls from fishing communities.
- Provide grants for the education of girls in private colleges — from the pre-degree stage.
- Help girls in fishing communities to get jobs in other professions. Enable job diversification.

These rights and demands, declared on Women's Day, reflect the deep-rooted aspirations of fisherwomen and the fighting spirit of the community as a whole. It shows their eagerness to be a part of the working class. The struggle of the fisherwomen's movement in Kerala on these lines for the past 10 years has definitely had made an impact on their livelihoods and their family life.

In terms of the time spent by women on various activities, as given below, the survey[18] suggests that women have started spending marginally more time on production and market activities. But they still bear the burden of domestic work as well. That women share a great proportion of both productive and household (including reproductive) work is evident everywhere.

[18] *The above data is for Chennai alone and includes 25 women*

Figure 21: Production vs domestic roles



Activities	Hours spent Per day (Average)	Code 1. Up 2. Down 3. No change
Production and Income Earning Activities	6.70	1 (Marginal Increase)
Market transactions/Going Out/Leisure etc	2.45	1 (Some Increase)
Domestic Activities and Household Work	8.04	3 (No Serious Change)
Overall	17.2	1 (Some Increase)

A few women, for whom the share of production activities relative to the rest of the family had gone up, cited the following as primary reasons:

- male member(s) migrated
- male member (s) died or set up new household
- children have grown up, so the women have more time
- their cash earning opportunities increased, so they participate more in production activities
- households became poorer, so they had to spend more time to production activities
- Girl child helps out
- Others

Women who spent more time on production activities said that they managed their domestic work as follows:

- Girl children/other women help with domestic chores
- Domestic work has to suffer
- Husband helps out with domestic chores
- Family size has shrunk, so less time is needed
- Cooking process has become less time consuming
- Water accessibility has improved
- This work burden is higher

4.3 Diversification of the Economy of Fishing Communities

There are several important reasons why the fishing economy must be diversified. It is over-dependent on a single resource base. This base cannot be further exploited. There are too many competitors for the same resource. Hence pressure must be reduced by taking people off fishing. Diversification will also clear the space for regulatory interventions. Diversification is a key need for innovative financing in fisheries, a point that has been noted in making recommendations.

5 Supply Side – Stakeholder Perceptions

These were several rounds of discussions with supply-side stakeholders. Their perceptions of the fisheries sector are given below:

Variability: There is a huge variability in catch across fishers/geographies, etc. The variable and cyclical income of fishermen was a major issue mentioned by bankers.

Inability to demonstrate savings: Fishermen are unable to generate cash savings. Traditionally they have been conditioned to spend all their earnings and rely on borrowings for any emergencies or additional expenditure.

*Seasonality***:** The fish stock moves from one place to another seasonally. Hence catch depends on the season. A good season in one place normally lasts for 6 to 7 months, the remaining months constitute a lean season. Cash flow varies with the season. Further, the value of catch depends on the type of fish catch, a fact influenced by environmental changes within the sea as well as on the coast.

Perishability: Fish is a highly perishable commodity. Very strong output linkages and storage facilities are a must for getting a good price for the catch, as it is a highly perishable commodity. Salvage value goes down quite quickly with time.

*General Risk***:** Fishing is generally a high-risk business. Lives and assets are at high risk during fishing.

*Fairly High Depreciation***:** A fairly high rate of depreciation applies to fishing equipment. Boats and other equipment depreciate quite fast. They need to be replaced within 3 – 5 years or seven years at the maximum

*High Investment Business***:** As the cost of fishing equipments is very high, it is also prohibitively costly to buy these equipments. The small fishermen generally work in groups where one person owns the equipments and remaining invest through labor. As per informal estimates per boat there are three to four small fishermen dependent on it. Ratio of owners to coolies is 1:4 or so. and so, it is high investment with diminishing returns today due to over crowding and unsustainable practices.

*Migration***:** There has been a tendency for small fishermen to migrate to other areas in search of the better fish catch for longer periods of time.

*Continuous Technological Changes***:** The bigger fishermen (using trawlers) continuously invest in technology upgradation (GPS, improved nets and improved storage mechanisms) and hence get a better catch as compared to small fisherman using traditional methods and equipments. They generally go for deep-sea fishing by leveraging their technological strength and hence reducing the variability/seasonality associated with the business. In some ways, the presence of these trawlers causes numerous hardships for the low income fisherfolk.

*Exclusive Livelihood***:** Most of the fishermen exclusively depend on fishing for their livelihoods. They generally do not have other supporting livelihood activities to fall back on during lean season or during any major calamity. This makes them more of a credit risk as also a very vulnerable group.

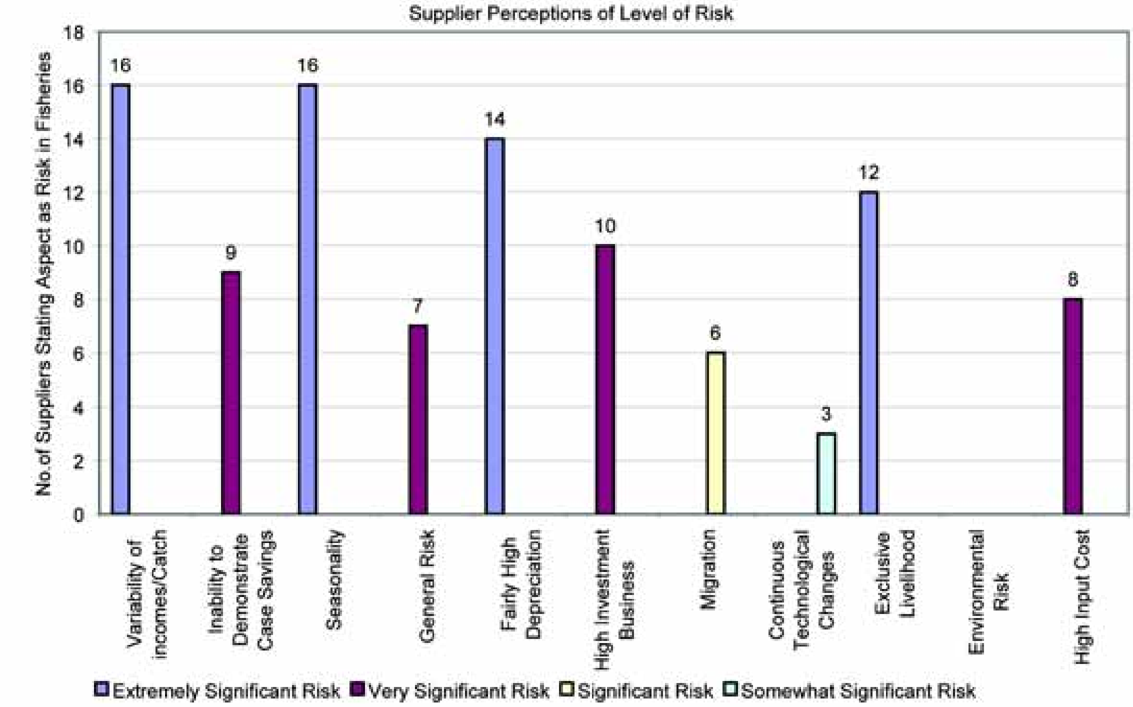
*Environmental Risk***:** Due to continuous degradation of environment, fish catch along the coastline is dwindling. This is evident from the fact fishermen need to travel father and farther out from the coast to catch fish. This increases both risks and expenses. Management of open-access resources require careful attention.

*High Input Cost***:** Fishing today has become cost intensive – output per unit of investment is rather low and same output can be got with less investment. However, Government subsidies are slowly increasing the investment in fishing. Example: subsidies for engines spur fishers to go for high-investment engines. The subsidy component sometimes generates corrupt practices. Example: a fisher shows some one else's engine ort boat and claims a subsidy. The increasingly intensive nature of fishing is also making it less attractive economically.

Thus, fisheries are perceived by bankers/suppliers/insurance companies. as an extremely risky sector. These suppliers lack staff with fisheries knowledge; this makes the task of investment even more difficult.

The views of suppliers have been collated and presented (below) in a graph. The idea is to relate individual components to the significance and level of risk

Figure 22: Supplier perception of level of risk



The fact that fisheries and associated sub-sectors contribute substantially to the GDP and the economy should be recognized. Special attention must be paid to fisheries because of its uniqueness — availability of unenforceable collateral, lack of collateral substitutes, volatility in fish production, weather vagaries. Special financial products are essential for fisherfolk; alternative delivery mechanisms are imperative if low-income fishers are to survive, and sustain their livelihoods. In fact, an analysis of supply-side data (next section) reveals that bankers/other suppliers have used these perceptions to guide their investment to small scale fisheries.

5.1 Supply Side Data and Analysis in Different States

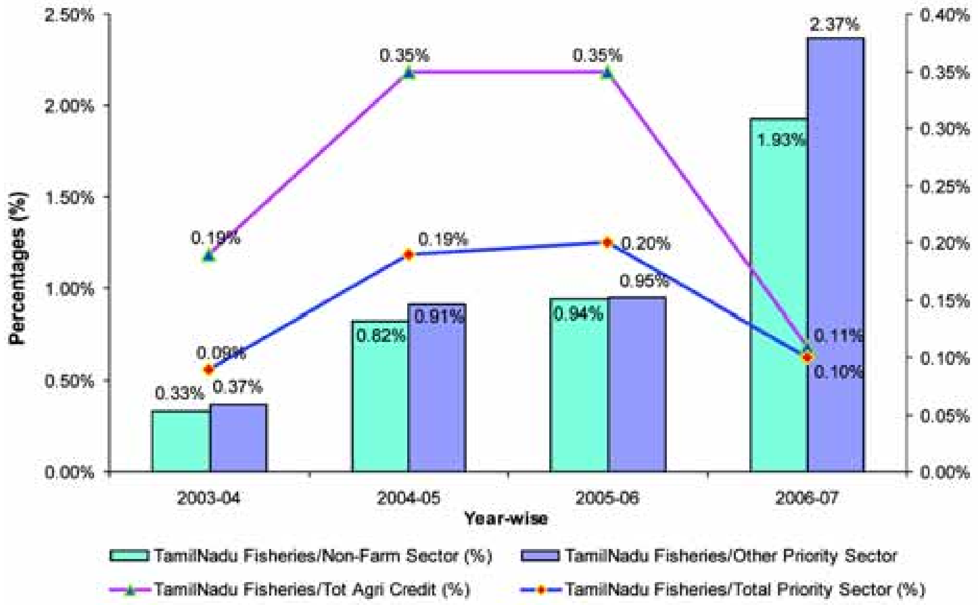
Supply-side data also indicate that the perceptions mentioned earlier have indeed had an impact in terms of lesser/lower formal financing being available for the fisheries sector. This appears to be true irrespective of the geographic state and the following trends are evident from the data given in the next few pages in Tables 16 to 25.

Table 16: Supply Side Data and Analysis in Tamil Nadu State Year-Wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	0.19%	0.33%	0.37%	0.09%
2004-05	0.35%	0.82%	0.91%	0.19%
2005-06	0.35%	0.94%	0.95%	0.20%
2006-07	0.11%	1.93%	2.37%	0.10%

[19] *Source: Data's taken from NABARD official documents (2006) and other resources*

Figure 23: Supply side data and analysis in Tamil Nadu State

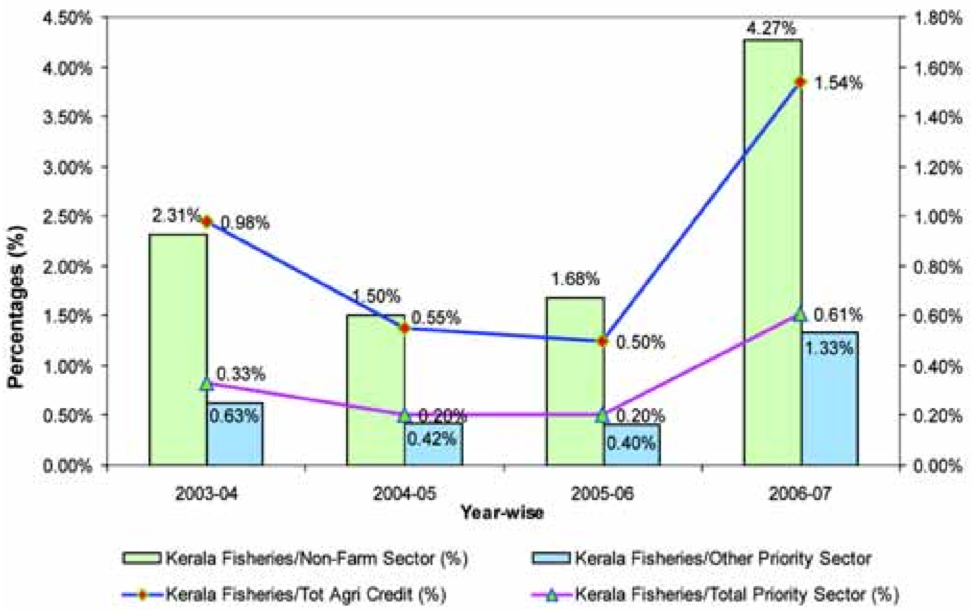


State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
Tamil Nadu	Decreased over period 2003-2006 and absolute percentage is also low	Increased a little	Increased a little	Marginal increase but overall percentage age is quite low

Table 17: Supply Side Data and Analysis in Kerala State Year-Wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	0.98%	2.31%	0.63%	0.33%
2004-05	0.55%	1.50%	0.42%	0.20%
2005-06	0.50%	1.68%	0.40%	0.20%
2006-07	1.54%	4.27%	1.33%	0.61%

Figure 24: Supply side data and analysis in Kerala State

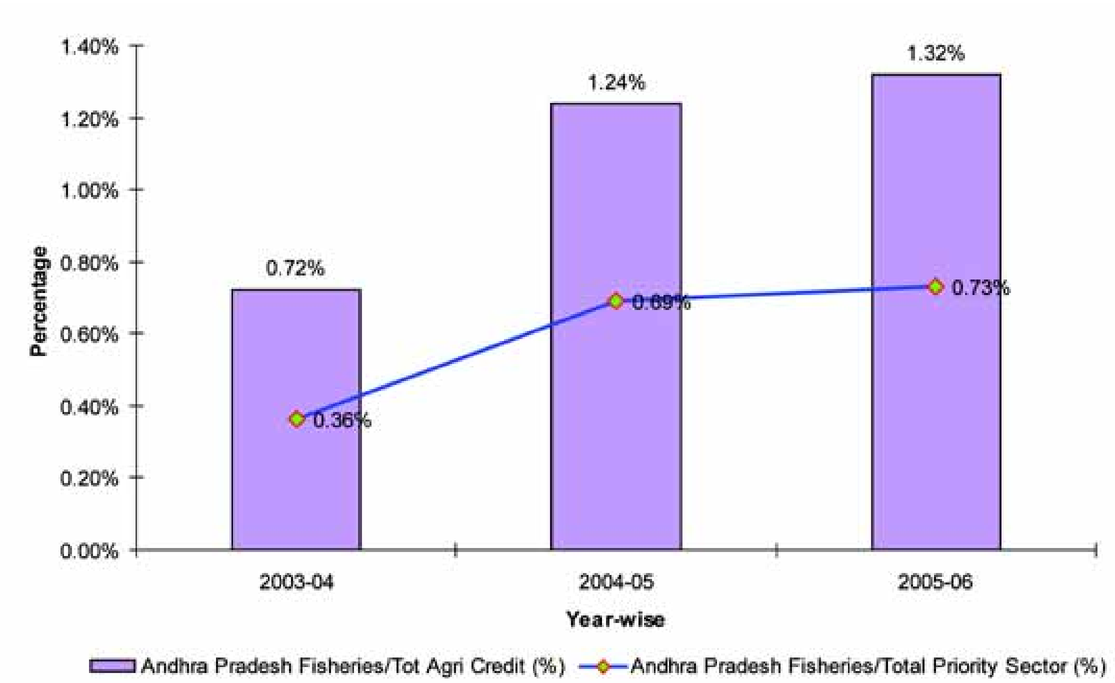


State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
Kerala	Marginal increase but overall percentage is quite low	Nearly doubled in percentage terms but quite low	Nearly doubled in percentage terms but quite low	Nearly doubled in percentage terms but quite low

Table 18: Supply Side Data and Analysis in Andhra Pradesh State Year-Wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	0.72%	NA	NA	0.36%
2004-05	1.24%	NA	NA	0.69%
2005-06	1.32%	NA	NA	0.73%

Figure 25: Supply side data and analysis in Andhra Pradesh

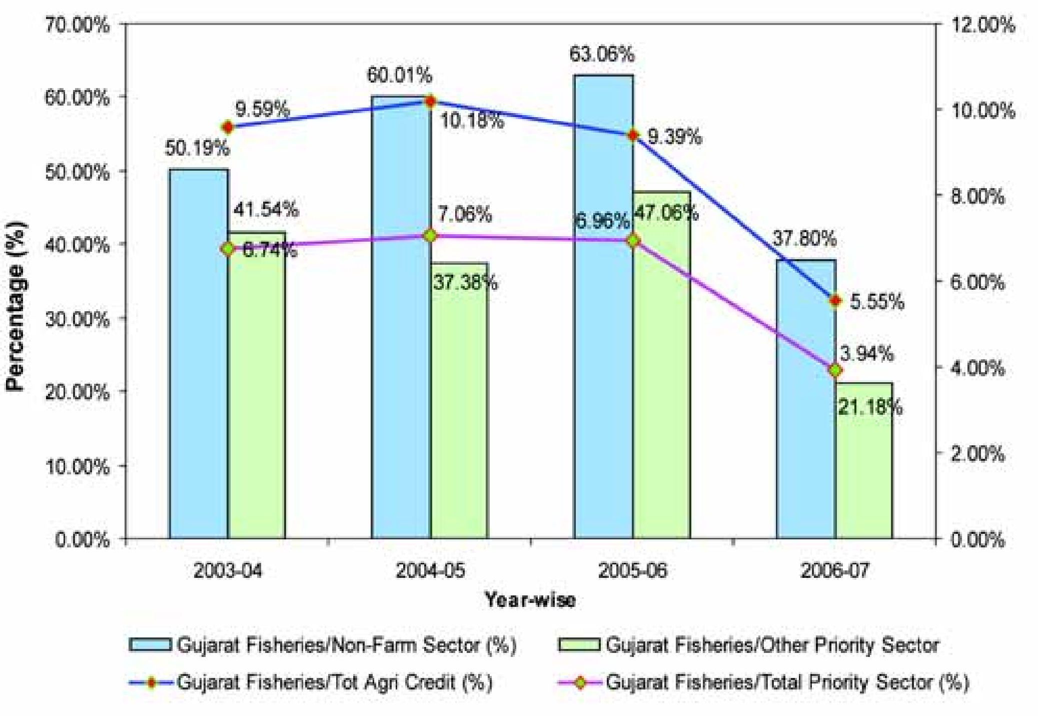


State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
Andhra Pradesh	Nearly doubled but percentage quite low	Nearly doubled but percentage quite low	Nearly doubled but percentage quite low	Nearly doubled but percentage quite low

Table 19: Supply side data and analysis in Gujarat State year-wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	9.59%	50.19%	41.54%	6.74%
2004-05	10.18%	60.01%	37.38%	7.06%
2005-06	9.39%	63.06%	47.06%	6.96%
2006-07	5.55%	37.80%	21.18%	3.94%

Figure 26: Supply side data and analysis in Gujarat

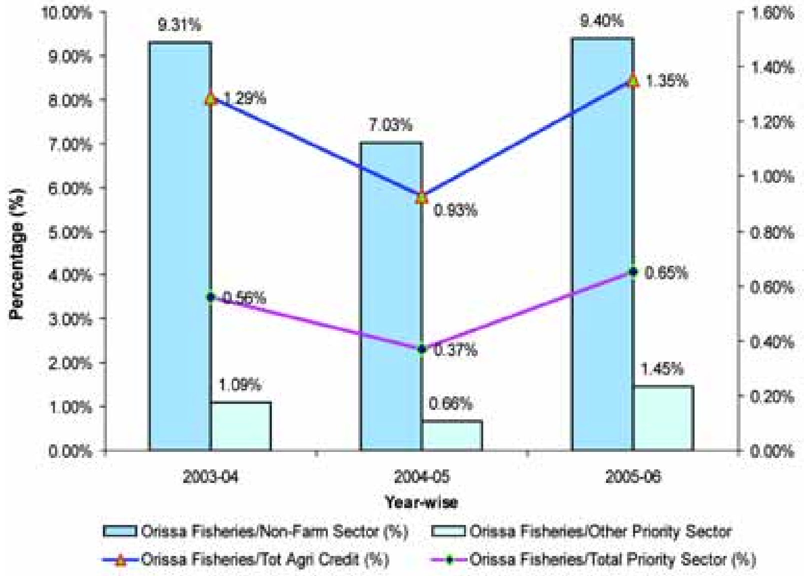


State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
Gujarat	Decreased by almost 100%	Substantial decrease	Decreased by almost 100%	Decreased by almost 100% and low in percentage terms

Table 20: Supply side data and analysis in Orissa State year-wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	1.29%	9.31%	1.09%	0.56%
2004-05	0.93%	7.03%	0.66%	0.37%
2005-06	1.35%	9.40%	1.45%	0.65%

Figure 27: Supply side data and analysis in Orissa State

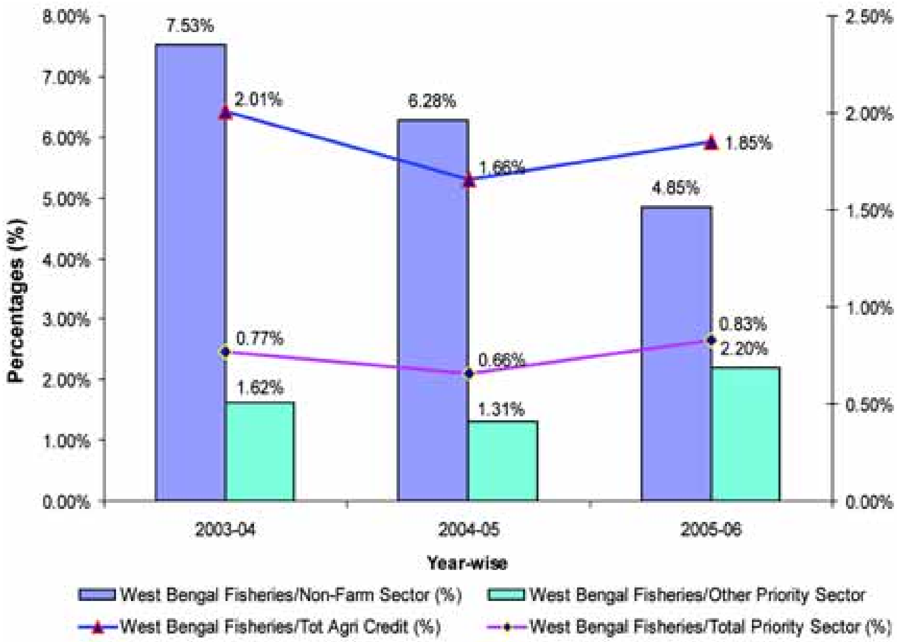


State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
Orissa	Marginal increase but percentage is still quite low	Marginal increase	Marginal increase but percentage is still quite low	Marginal increase but percentage is still quite low

Table 21: Supply side data and analysis in West Bengal State year-wise

Year	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
2003-04	2.01%	7.53%	1.62%	0.77%
2004-05	1.66%	6.28%	1.31%	0.66%
2005-06	1.85%	4.85%	2.20%	0.83%

Figure 28: Supply side data and analysis in West Bengal State



State	Fisheries/Total Agriculture Credit (%)	Fisheries/Non-Farm Sector (%)	Fisheries/Other Priority Sector	Fisheries/Total Priority Sector (%)
West Bengal	Marginal decrease but percentage still quite low	Significant decrease	Marginal decrease but percentage still quite low	Marginal decrease but percentage still quite low

The data for all states are summarised in table below:

Table 22: Supply side fisheries/total agriculture credit data and analysis in State-wise

States	Fisheries/Total Agriculture Credit (%) 2003-2004	Fisheries/Total Agriculture Credit (%) 2004-2005	Fisheries/Total Agriculture Credit (%) 2005-2006	Fisheries/Total Agriculture Credit (%) 2006-2007
Tamilnadu	0.19%	0.35%	0.35%	0.79%
Gujarat	9.59%	10.18%	9.39%	5.55%
Orissa	1.29%	0.93%	1.35%	-
West Bengal	2.01%	1.66%	1.85%	-
Kerala	0.98%	0.55%	0.50%	1.54%
Andhra Pradesh	0.72%	1.24%	1.32%	-

Table 23: Supply side fisheries/non-farm sector data and analysis in State-wise

States	Fisheries/Total Agriculture Credit (%) 2003-2004	Fisheries/Total Agriculture Credit (%) 2004-2005	Fisheries/Total Agriculture Credit (%) 2005-2006	Fisheries/Total Agriculture Credit (%) 2006-2007
Tamilnadu	0.33%	0.82%	0.94%	1.93%
Gujarat	50.19%	60.01%	63.06%	37.80%
Orissa	9.31%	7.03%	9.40%	-
West Bengal	7.53%	6.28%	4.85%	-
Kerala	2.31%	1.50%	1.68%	4.27%
Andhra Pradesh	NA	NA	NA	-

Table 24: Supply side fisheries/other priority sector data and analysis in State-wise

States	Fisheries/Total Agriculture Credit (%) 2003-2004	Fisheries/Total Agriculture Credit (%) 2004-2005	Fisheries/Total Agriculture Credit (%) 2005-2006	Fisheries/Total Agriculture Credit (%) 2006-2007
Tamilnadu	0.37%	0.91%	0.95%	2.37%
Gujarat	41.54%	37.38%	47.06%	21.18%
Orissa	1.09%	0.66%	1.45%	-
West Bengal	1.51%	1.31%	2.20%	-
Kerala	0.63%	0.42%	0.40%	1.33%
Andhra Pradesh	NA	NA	NA	-

Table 25: Supply side fisheries/total priority sector data and analysis in State-wise

States	Fisheries/Total Agriculture Credit (%) 2003-2004	Fisheries/Total Agriculture Credit (%) 2004-2005	Fisheries/Total Agriculture Credit (%) 2005-2006	Fisheries/Total Agriculture Credit (%) 2006-2007
Tamilnadu	0.09%	0.19%	0.20%	0.45%
Gujarat	6.74%	7.06%	6.96%	3.94%
Orissa	0.56%	0.37%	0.65%	-
West Bengal	0.77%	0.66%	0.83%	-
Kerala	0.33%	0.20%	0.20%	0.61%
Andhra Pradesh	0.36%	0.69%	0.73%	-

To summarise, as evident from the above data, its clear that suppliers have not directed much attention to fisheries. The suppliers have cited several operational constraints. These are outlined in the table below.

The discussion with various stakeholders revealed that regulatory enabler(s) are necessary to deepen financial services for low-income fishers in India. Currently, several aspects need attention in this context. They are listed below:

Table 26: Constraints and Regulatory Enablers Mentioned by Suppliers

Issue	Description/Recommendation
Banking	
Opening of Branch Extension Counters/Branches	Undue delay occurs in clearances for opening of branches/extension counters. This needs regulatory attention. Likewise, the procedures for applying for license for ATM/ other devices need to be simplified. Either a physical or a virtual branch network is required to deliver financial services to low income people including fishers. RBI must therefore simplify procedures for new branches, extension counters, use of ATMs and such devices. Timely and speedy approvals would be extremely useful. A free licensing policy is suggested for opening branches and ATMs. This will enable better expansion and financial inclusion.
Business Correspondent/ Business Facilitator Aspects	The banking correspondent/ banking facilitator circulars issued by RBI are welcome in that they encourage the use of a wide range of <u>intermediaries</u> (including MFIs). a. There is a specific <u>disadvantage</u> for private sector banks. NBFCs /have been ex cluded from the permitted list (through a circular of March 2006) <u>although</u> they figured in the original list (circular of Jan 2006). Regulations must be changed to enable NBFCs to act as Banking Correspondents. This regulatory change should pave the way for private/MNC commercial banks to serve low income customers better.
	b. Private companies that <u>buy back produce</u> from low-income fishers and other such processors could have value in being banking correspondents – through <u>contract fishing</u>, warehouse receipts and other financing etc. This option may facilitate greater inclusion. It is therefore suggested that RBI also classify such output purchasers as Business Correspondents. Exporters and processors would come under this category.
Outsourcing Guidelines and Problem Areas	The RBI Circular on outsourcing says "**2. Activities that should not be outsourced:** Banks which choose to outsource financial services should however not outsource core management functions including internal audit, compliance function and decision-making functions like determining compliance with KYC norms for opening deposit accounts, according sanction for loans (including retail loans) and management of investment portfolio'. *"(RBI Circular Dated on November 03, 2006, page no. 3)"* This requirement of not outsourcing critical functions is a very difficult requirement, at least as far as the delivery of low income finance is concerned. If therefore suggested that while requirements of commercial banks having an outsourcing policy (including its risk management) is absolutely essential, the RBI may take a liberal view on loan sanctioning and related activities of banking correspondents and <u>exempt</u> these from being done in-house-compulsorily.
Level Playing Field for All Commercial Banks and Between Agriculture and Fisheries	There are some obvious differences in the operations of public and private sector commercial banks, MNC banks and cooperative banks. Example: public sector banks receive a 2% subsidy for loans to farmers, that private sector banks do not. This may serve as a disincentive for private sector banks in lending to small/marginal farmers. RBI must create a level playing field for all commercial banks and extend this conces sion to private banks for loans to fisheries.
Political Interference and Related Aspects	With low income financial services delivery political interference occurs because of its impact on money lenders and others. It appears to be increasing at the local level. Religious groups are also active and pushing various institutions towards lowering interest rates. Thus, all loans to Low Income People including fishers, irrespective of intermediary need are to be stipulated as 'Banking Transactions'

Insurance	
Trusts as Micro-Insurance Agents	Many NGOs in India are registered as trusts and not as societies. Some of these trusts are parts of corporate houses that have adopted villages as an exercise in corporate social responsibility. Insurance companies could leverage these trusts to spread MI products. NGOs registered as trusts should therefore be permitted as MI agents. IRDA should issue an appropriate amendment.
Policy Refunds in Cash (Dispensation)	Most micro insurance policy holders in rural areas are unlikely to have bank accounts. They must be paid in cash. Insurance companies must be allowed to pay amounts less than Rs.1,000 in cash to policy holders through agents against an indemnity
	bond furnished by the agent to the insurance company. Alternatively, the agent could be reimbursed through cheque by the insurance company against a cash receipt from the agent.
TDS Exemption for Agents	Micro insurance business generates some small commissions to agents. Under the existing tax regime, it is compulsory for Insurance companies to deduct tax at source from agent commissions. But many NGOs and SHGs do not have the ability to file returns and claim refunds. Exempting MI agent income from TDS would therefore be a useful step.
Orphaned Policies and Agents	MI regulations do not address the assignment of policies to a servicing agent, after policies are orphaned because of the original MI agent's attrition/termination. The authorities should allow policies to be assigned to a new servicing agent. Future commissions must be made payable to new agents. In such a situation, sufficient safeguards many be needed to ensure that companies have adequate and fair reason to make such a change in the first place.

6 Recommendations

6.1. Make harvest fisheries viable by strictly enforcing regulations

Catch volumes of capture fisheries in inshore waters have stabilised across India and Tamil Nadu (Please see catch data on Tamil Nadu[20]). Due to **limited occupational mobility**, fishing communities are not able to diversify rapidly into other sectors of employment.

Because too many people are chasing too little fish in the same space, there is **unhealthy competition**, leading to overcapacity (higher horse power engines, more aggressive fishing techniques, larger volumes of nets, break down of traditional fishing restrictions on mesh size, timing, zoning…) and increasing tensions among various segments of the sector.

Hence stringent enforcement of the regulatory policy is urgent. It should cover

- Zoning,
- Seasonal bans,
- Control over fleet size,
- Craft/gear combinations,
- Licensing and registration[21], and perhaps,
- Quota systems[22].

The overall objective should be to restrict/control fresh inflow of financial and other resources into capture fishery in the inshore waters. This is a very critical aspect for FINANCIAL VIABILITY of fishers engaged in harvest fisheries.

6.2. Phase out the mechanised sector and enable diversification

To ensure viability of small-scale fisheries, financial investment, particularly in the mechanised sector, should be phased out. Diversification should be encouraged.

This calls for great caution in financing new units in mechanised fisheries. Engines of higher horsepower should be discouraged. Increase duties, raise tariffs and interest rates, toughen finance flow.

It is recommended that Ministry of Finance/Reserve Bank of India constitute an internal/external working group to ensure that appropriate guidelines are framed to prevent lending by any financial institution (including NCDC) in support of unsustainable marine fishery practices including use of:

- Circle Nets
- Trawlers (RS)
- Higher Horse Power Engines, etc.

Other unsustainable practices may be identified by this internal/external working group and circulars issued accordingly.

6.3. Remove distortions in financial markets

Subsidies: There are huge distortions in financial markets which are imperfect – subsidies are available through certain channels where as other channels do not have it, like in case of engines, where subsidies are available through Matsayafed alone. So, there is a need to create a level playing field by making subsidy available to individuals irrespective of organizational affiliations. State governments must be dissuaded from giving subsidies through their own channels alone. If these subsidies exist, they should

[20] *Available with Authors. Contact Ramesh S Arunachalam, r_arunachalam@hotmail.com*

[21] *The issue of registration is a very critical one and is very much required for insurances, etc.*

[22] *While the decentralised nature of fishing makes it difficult to enforce quotas and an output related regulation, it is nonetheless worth trying in a small area with incentives*

be available to individuals, irrespective of institutional affiliation. In general, production subsidies should be reduced

Supply-side distortions: These distortions must also be addressed. National Cooperative Development Corporation (NCDC) must lend to all intermediaries and channels. There is a need to create guarantee interventions to enable producer groups and MFI type channels to access and leverage more funds from NCDC and other such organisations.

Interest Subvention: The issue of a level playing field also concerns private versus public sector banks. The interest subvention by Government of India, currently available only for public sector banks needs to be extended to private sector banks. Also, this interest subvention must be (specially) made available for fisheries as well, just as it is for agriculture

Please refer to relevant RBI circulars: (Agriculture loans subvention 2% - Circular Farmer 7% loan circular, and Union Budget 2006-2007 – proposal for ensuring short term credit to farmers at the interest rate of 7% p.a.) (Weblinks: http://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx? Id=3510)

6.4. Revitalise State-run financial institutions, make them autonomous

Governments should make financial institutions autonomous. There are very many examples of unviable government financing. They should instead strengthen the capacity of existing cooperatives in Tamil Nadu at the village level and create federations at district/state levels. While the Government's aim to re-vitalise these cooperatives is right, the best approach would be:

Strengthen governance, transparency, management and systems in village cooperatives and ensure/enable autonomy for their operation by allowing these cooperatives to really function as cooperatives - by, for and of the people. Aspects that would require consideration include the following:

a. Board of directors' roles, functioning and composition: with attention to independent directors, terms of office, rotation of board of directors, status of chairperson, segregating CEO and chairperson, capacity building of directors
b. Board independence with attention to composition and remuneration of board members and measurement of board performance
c. Use of sub committees on the board with the focus on their composition, number of members, independence in functioning, expertise of members, frequency of meetings and whistle blower procedures.
d. Code of conduct of board: whether it exists, whether it is complied with and whether action is possible against members who are non compliant.

e. Auditors: with attention to method of appointment, rotation mechanisms, relationship to company in terms of granting of other work etc,

f. Risk management procedures available and adopted by the board.

g. Information disclosure on performance of the institution as evident from the MIS including reporting of off balance sheet, and other aspects.

h. Recognition of right of various stakeholders and measures to protect rights these.

i. CEO appointment and succession, and

j. Other aspects

Further, the SIFFS/Matsyafed 'model' for harvest fisheries and SIFFS/Dhan/ICNW models for post harvest activities could be adapted and replicated – all at the village cooperative level.

The affiliated state federation could be scaled up into an autonomous Fisheries Cooperative Bank (with district outlets). The assistance of NABARD and NCDC should be mobilized for capitalising this fisheries bank and building its capacity as follows. .

- Establishing appropriate governance mechanisms including greater representation for clients as directors and senior managers in these cooperatives
- Instituting client oriented management systems and processes at MFIs/intermediaries including real transfer of authority along with responsibility
- Facilitating more clients to become a part of the human resource pool and providing special incentives to institutions that support this
- Allocating financial resources required for sensitization of various stakeholders including MFIs, regulators, rating agencies and others with regard to fisheries
- Designing, testing and rolling out special products and delivery mechanisms suited to the unique needs of fishers, particularly, those that cater to reducing their risk and vulnerability,

6.5. Provide composite life and health insurance products for protection

Fishing communities are vulnerable to epidemics such as Chikungunya because of their living conditions. There is a huge opportunity for governments to structure composite (life and medical) insurance products, since the current penetration of such financial products is almost nil. There is also a need to sell through intermediaries like (SIFFS/DHAN/WWF) and their federations or other innovative mechanisms like CRIGs[18] /SHGs to ensure on-time payment of premia and good service. The distribution mechanism is very critical for insurance and without this, no insurance product, however well designed, will be effective. Private sector insurers like Tata-AIG have very valuable experience in structuring and distributing products for low income people and they could be invited to pilot models and products as also others.

a) Please refer to an excellent scheme operated by Kudumbashree and the same could adapted and replicated for fishers in Tamil Nadu, Kerala and Other States **(please see Annex 2.)**

b) Composite Insurance for CREW Members: Unnamed crew insurance is already in practice (SIFFS) but some useful RIDER's can be added to these existing products – like critical illness and/or other such riders. IRDA may be approached to provide special permission for such products, given the nature of the fisheries sector

   Please refer to **Annex 2** for SIFFS scheme but a composite insurance for crew members, as per Kudumbashree's example **(Annex 2)** is suggested. Such a product could be made available for men and women in the fisheries sector and could be adapted to the special needs of the fisheries sector. Initial discussions were held with insurance companies and they seem quite keen to participate in such an effort but the talks will have to initiated at the senior levels of the government and concluded as a social protection measure.

c) The delivery mechanism plays a critical role and here participation of local fishers must be explored and tried. This is with regard to life, health or asset insurance etc. Some key lessons in this regard are given hereafter. Basically, the distribution channels must suit customers. They should deliver what clients want in a way that will reach them. To provide cost-effective service to a low-income fisher clientele, the channels need to:

- Adopt a suitable institutional and distribution structure that is suitable for the fisheries context
- Keep administrative costs low by using technology, outsourcing some functional responsibilities to fisheries related local producer or other organizations and leveraging existing infrastructure for distribution
- Use a distribution system that is familiar and comfortable to the customers – that is critical
- Provide good claims service that is seen to respond quickly and fairly
- Set up an effective premium collection system to minimize or prevent lapses
- Avoid entangling insurance and credit risks by ensuring insurance distribution is managed separately, and
- Establish systems to ensure that controls and guidelines are properly followed in distribution

6.6. Enabling provisions needed to assist in delivery of insurance products

For asset insurance for boats to be expanded, several internal control aspects need attention - like registration number, location etc. These aspects require regulatory attention from the government and all boats must be registered and have a unique (ID) number. Special mechanism like numbers in multiple places, stamping of special (identification) numbers on bottom of boat and other strategies could be introduced.

6.7. Voluntary savings – attitude change, products and mechanisms

Voluntary Savings: The SIFFS system of compulsory contribution of 10% for loan repayment, 4% towards savings and 3% towards meeting expenses of federation has resulted in generating cash surplus and timely loan payment to fishermen, to a large extent. However, there is a need to enable the fishers to inculcate financial discipline and save, voluntarily. While the debt swap type of loan will help in generating good savings of discretionary income, there is genuine need to change attitudes and producer organisations/ governments must facilitate that. Banks can also work with producer organisations to collect savings as per the banking correspondent model with ATM's and also serve as conduits for insurance layered on savings. Please refer to Business Correspondent circulars of RBI (Weblink: http://www.rbi.org.in/scripts/ BS_Circular IndexDisplay.aspx?Id=2718)

6.8. NABARD support for fisheries sector

NABARD MFDEF/Innovation Fund should allot some money to the fisheries sub-sector to help pilot-test various models and methodologies (see below). The usual norms of risk-return trade-off and evaluation of proposals need to be looked at with flexibility in case of fisheries projects, given the unique nature of fisheries. Standards of portfolio quality, capital adequacy and related aspects, should be adjusted to reflect the nature of fisheries sector – this does not imply reduction in standards but rather it calls for adaptation of standards of portfolio quality to the fisheries sector.

6.8.1. Facilitate establishment of pilot projects in the following areas:

Gender: Wife-beating, violence against women, multiple wives – such problems came up mainly during interviews with non-institutional fisherfolk. Even within institutional models, much more needs to be done with regard to mainstreaming gender. It has a clear linkage with financing for gender equality. Women have several unique needs and demands. Special pilot activities could be carried out. The focus of interventions in the area of gender could include:

A) Special financial products for women: PRAs suggest that the largest source of stress (for low-income fisher women) appeared to be loan repayments. There is increasing evidence that traditional loan products, especially relating to weekly repayment, cause women great stress. Pilot activities that promote understanding on how to create products specifically for women, with loan terms and conditions convenient to women's needs, are required. These action pilots need to be carefully structured and evaluated over time – so that appropriate information is obtained about the entire gamut of risks that women face in their daily struggle for survival, about their coping mechanisms and strategies, about how their risks could be mitigated by delivery of products through appropriate mechanisms. This information could be collated to serve as a guide to promoting innovative and gender-oriented financial services in fisheries including different types of products, processes, delivery mechanisms and the like

B) Delivery of risk-management products tailored to needs of low-income women: While, the design of specific and innovative micro-insurance products tailored to needs of low-income women has received significant attention, a more crucial aspect concerns the design and **distribution** of these micro-insurance and risk mitigation products in fisheries. An action research pilot project is needed that would throw light on micro-insurance for low-income women in fisheries, especially post-harvest fisheries.

Table 27: Composite PRA Analysis of Life Cycle Events, Emergencies and Setbacks Across 46 Groups

Scale of 1- 10	Life Cycle Events
Relative Financial Pressure	**Event Values (Average)**
Loan repayment	8.7
Illness	7.2
Schooling	5.2
Children's marriage	5
Retirement	4.1
Set up a home	3.6
Prolonged Illness	3.1
Marriage	3
Looking after ageing parents	2.1
Birth of children	2
Death of Parents	2
Death of spouse/ son/son-in-law	0

C) Reducing transactions cost for retailing with technology: The search for a low-cost technology-based retail model for delivering financial services to low-income fisherwomen on a mass scale merits attention. Can the use of mobile phones and other such mechanisms be scaled up? Very often, successes in pilot activities are not replicable on a larger scale. It would be a smart strategy to Invest in public-private partnerships and provide efficient technology-based scaleable retail models to help low-income fisherwomen.

D) Encouraging public-private partnerships to overcome market imperfections. This is a key aspect. Pilot projects *to enhance diversification of fishers into urban and rural livelihoods are required. Such pilots should: (1)* Attempt to spark (sustainable) growth with regard to micro-enterprises and micro-livelihoods systems for low income fisherwomen; and (2) Facilitate development of strong and vibrant micro-enterprises and micro-livelihood systems. These should be in areas,where a large number of low-income fisherwomen are active. By *doing this, they should ensure a fair, equitable and value-added distribution of revenue from the supply chain for various products/services in which low-income fisherwomen have a natural advantage.*

E) Enabling livelihood financing for women through larger loans/individual lending: There is a great window of opportunity for MFIs to get into "livelihoods financing", in partnership with bankers/ corporates and other(s) through public-private partnerships. MFIs could certainly play a important role through livelihoods financing with a single product or a combination of several products, tailored to the needs of low-income women: (1) Warehouse Receipt Financing; (2) Cash Flow Based Financing; and (3) Other Innovative Products including leasing. All of these need to be piloted in different contexts, with a view to further build and scale up financing for gender equality, especially in fisheries.

Client education and protection

A) Financial discipline: Another critical area for pilots is financial discipline. Across the board, the findings indicate that fishers splashed money when they had it. Institutions must come up with an intervention to inculcate the savings habit among clients. It should be not just a savings product but a program to encourage savings behaviour. A pilot could be initiated here.

B) Financial literacy: Financial literacy should be promoted. Topics could include How is EMI calculated? Why is saving necessary during the peak season? Why long-term savings? A special pilot to facilitate financial literacy and ensure client protection would be useful.

C) Ban and livelihoods: The 45 day ban seems to affect economic activity in places like Ramnad where April/May is said to be a good season. The government should ascertain whether the present ban crowds out fishermen in the peak season. Options for alternative sources of livelihood could be created during these off season (ban) periods. A special pilot project on diversification of livelihoods should be conducted as per the research conducted by ICM

Other Aspects

A) Killer Assumptions*:* Existing models in capture fisheries assume that the world of today is the same as the world of yesterday. This is a killer assumption. A special pilot project that focuses on alternative methods of estimating cash flows, repayment and delivery, could be supported. This project could also focus on flexible payment holidays, interest, principal moratorium and the like.

B) Economics data base and credit scoring*:* There is need for HARD data and relative cost data. A scientific template – that models the economics for units using hard data across locations, borrowers, geographies and time - is necessary so that it can be used in fisheries financing. This is critical.

What can enhance credibility and finance flow to capture fisheries is the creation of a data base on catch and economics across seasons, across geographies, across crafts, across states for many borrowers. Institutions can use that to devise credit scoring models that will reduce the risks of lending to capture fisheries. The question is who will finance this social and public good? Perhaps it would need to be supported under the proposed challenge fund. The pilot could be tried with SIFFS, which already has a good MIS/database. .

C) Migration and financing*:* How to lend to migratory fishermen and also ensure that they replay correctly? This is an unresolved issue with many problems. Here again it would be very useful to try out different models as pilots.

D) Reducing the cost of inputs: A recurring theme is the cost-intensive nature of fishing –more inputs (kerosene) (etc) for the same output. So, how to reduce inputs and get environmentally friendly fishing technologies? What impact it will it have on income/livelihood security is something that needs to be tried out as a pilot.

6.9. Do not use traditional MF approaches for harvest/capture fisheries. Use traditional microfinance approaches for loans to coolies, women vendors etc.

Typical micro-credit approaches apply well to financing of vendors/hawkers, etc and perhaps crew (coolies). Holistic approaches appear to be more suitable for financing activities in the low income fisheries value chain — especially for capture fisheries. This integrated approach can be delivered by multi-purpose, large, well networked institutions that can diversify risks across craft types, geographies, etc. The table below highlights major difference between these approaches.

Please refer to **Annex 1** for illustrative individual catch data from SIFFS, whose model highlights are briefly given below:

Table 28: Micro-finance Applies to Post harvest financing for vendors/small processors and perhaps CREW Loans

SL. No	Traditional Micro-finance Applies to Post harvest financing for vendors, small processors and CREW Loans.	An Integrated Approach is critical for Capture Fisheries Financing
1	Loans generally < 10,000/- are sufficient amount for purpose	Generally, > 10,000 is required. Balance Credit is critical as this amount is not enough and generally done from other sources.
2	Small Loans	Larger Loans
3	Combination livelihoods possible	Generally, exclusive livelihoods
4	Production/Trading Activity	Generally, Harvesting/Hunting Activity
5	Good Practices, Good skill and some luck	Good Practices, Good Skill and Lots of Luck required for success-huge variability, which is smoothed over the longer
	required for success	term
6	Generally, not so Risky Production	Generally, Risky Production – risk is to humans/assets
7	Peer pressure works if there is non-repayment	Less pressure and more community accountability as loan sizes are large
8	Generally, women	Generally, men
9	Impact of variability and seasonality is less	Impact of variability and seasonality is more
10	Repayment possible from other sources as amounts are small, in case of production failure	Repayment is not possible from other sources, as generally exclusive livelihood and amounts are large
11	Diversified livelihoods, multiple livelihoods can be source of repayment	Fisheries is primary source of repayment
12	Greater control over production	Lesser control over production/harvesting
13	Delivery mechanism can be easily replicated and Quick replication is also possible	Delivery mechanism takes longer to develop – because accountability and trust are required. Experience and distinctive of competence of intermediaries is critical
14	Generally, consumption financing, some production loans etc	Generally, Livelihoods Financing
15	Loan utilization check possible	Loan utilization check less likely here
16	By and large, assets, people are locatable, traceable	Assets are very mobile and tracing is difficult
17	Easy to design financial products	Difficult because information asymmetry still exists even with best intermediaries as the chance or probability factor is quite high
18	Not always perishable products, services are also there;	Major product is highly perishable and makes it more vulnerable for producer
19	Imperfect markets do exist	Very significant market imperfections
20	Single focus financial intermediaries	Large, networked multi-purpose Intermediaries delivering financial and other services
21	Weekly/monthly repayment possible – fixed repayment terms	Notional monthly repayment only possible – flexible repayment term using cash flow based financing
22	Simple systems work well for internal control etc	Complex system required as large amounts of cash flow through system
23	Short Term loans are okay	Medium or Long Term Loans

Figure 29: Financial Intermediation and development services

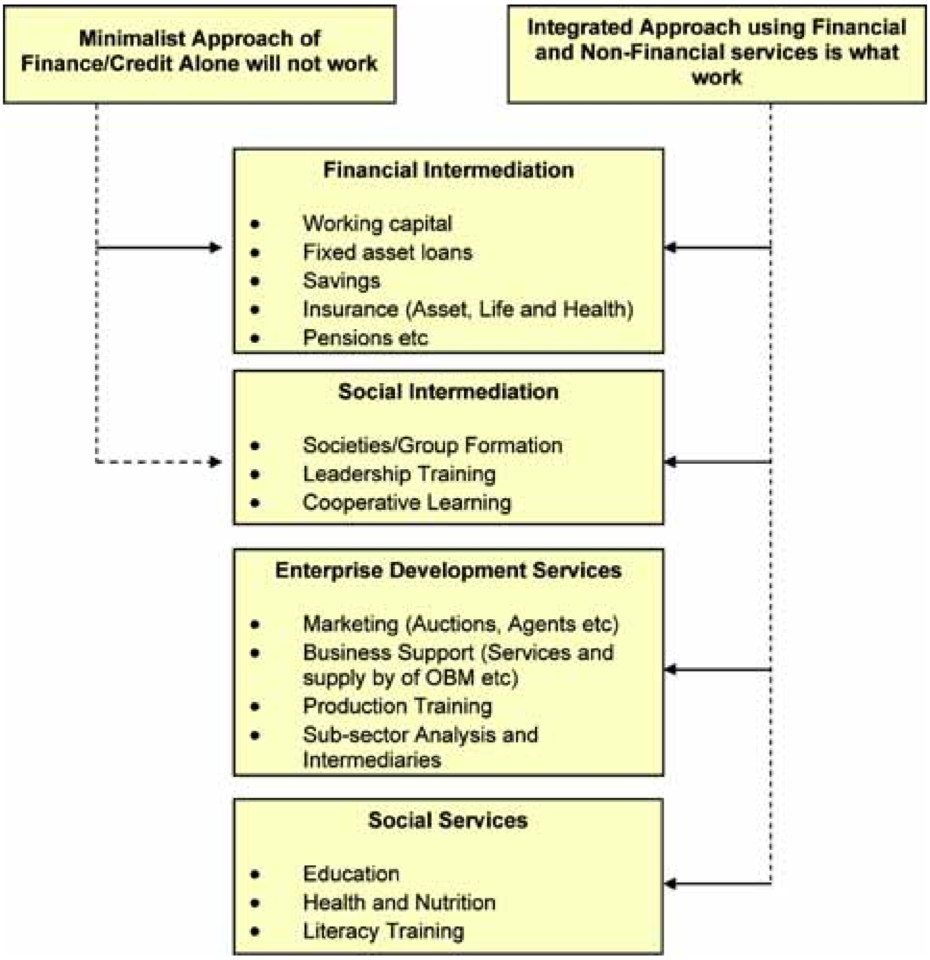
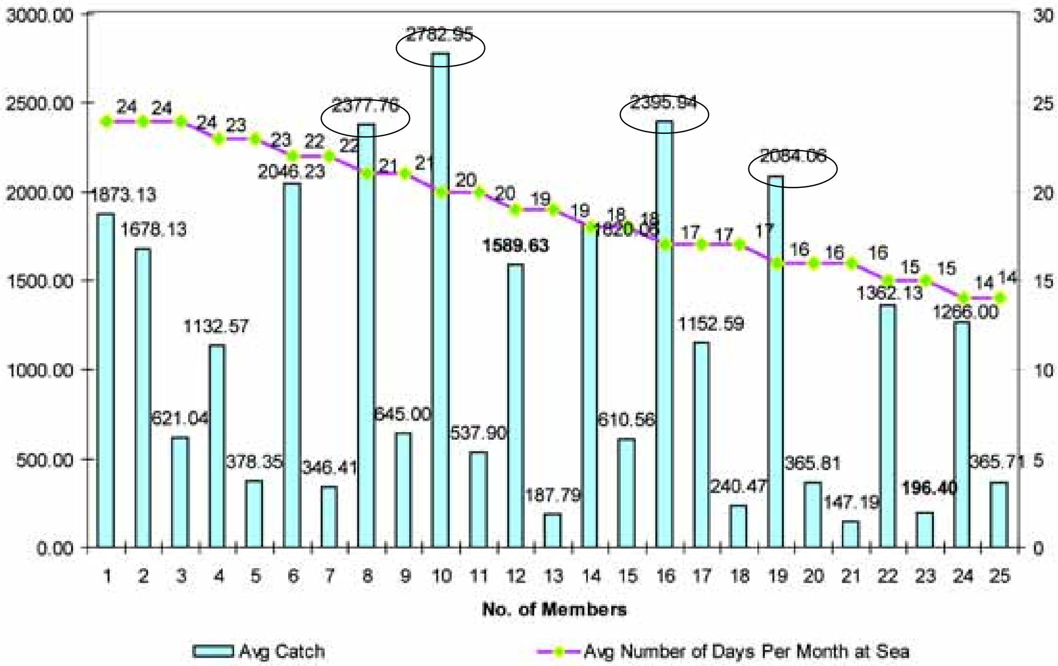
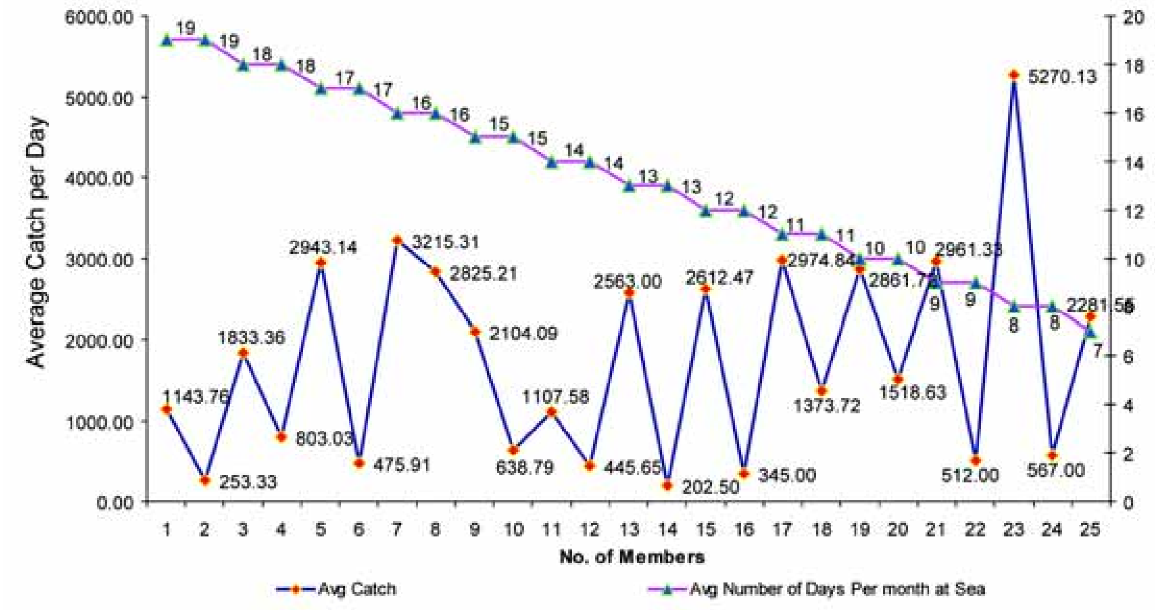


Figure 30: Fisheries cumulative multi year catch data analysis for 25 members (random)



On **Figure 30,** it is interesting to note that a fisher who has gone for fishing for 21 days (on the average every month) has the highest average catch/day (Rs.2783) followed by a person who has gone to sea for 18 days (Rs.2396) on the average per month.

Figure 31: Fisheries cumulative multi-year catch data analysis for 25 members (random chosen)



Further, as evident from **Figure 31**, likewise a fisher who has gone fishing for 8 days (on the average in a month) has highest catch/day (Rs.5271) while a person who has gone for 19 days of fishing on the average every month has just (Rs.1143) of catch/day. Thus, as evident from these figures, it is clear that capture fisheries has high variability.

This, variability is best countered by more fishing over medium/long term and hence Medium/Longer 'term' loans are more suitable because effects of variability/seasonality of catches can be countered. Mechanisms to collect and hold daily repayment are however critical – payment may be made weekly/ monthly to banks/institutions but the product must have provision for money to be collected daily and stored safely.

Box 7: Case Study: The SIFFS Integrated Model

The Three-Tier System

During the 1970s, certain church- based NGOs in Trivandrum and Kanyakumari districts of south India developed a village society model. In the mid-1980s, a three-tier system emerged to take up a variety of tasks. On the one hand, the higher tiers of the system took care of support services to strengthen the village societies' activities. On the other hand, they took up new activities that could not be performed by a village society. The second tier, the district federation, was mainly involved in providing support services like audit of society accounts, helping with bank linkages and trouble-shooting. The district federations also provide marketing support and linkages when needed and also help society members access cheaper inputs like nets and other fishing requisites. Certain welfare and educational activities have also developed over time in each district federation. The federations have also been compelled to get involved in providing credit due to the decline in credit availability from the banking sector due to a number of factors in the late 80s and early 90s. They have revolving funds based on grants received from donor organisations.

SIFFS as the overall apex organisation, was mainly intended in the mid -1980s to take up technology development and promotion, a role that became essential due to the declining fortunes of the traditional fishermen who faced unfair competition from mechanised trawlers. However, over time, SIFFS has diversified its portfolio in response to changing needs and opportunities.

Today SIFFS runs a network of boatyards manufacturing marine plywood boats as alternatives to the country craft. It imports and supplies out board motors (OBMs) and spares and also runs a network of OBM service centres. It has a large R&D programme involving development of new boats, improvements in propulsion, artificial reefs, safety at sea, improvements in fish handling, etc. It also runs ice plants and is trying out export of fish under a social labelling initiative. It has also taken up the responsibility to extend the society network in northern Kerala, Central Tamil Nadu and Andhra Pradesh. Policy research and advocacy is added to these activities. The development of a large micro-finance programme in recent years is of particular relevance to this article.

SIFFS enters microcredit

By the mid-1990s, a major gap in credit availability had emerged as a combination of factors. Firstly, the banking sector had become less accessible due to the aftermath of the loan write-off scheme and the populist loan melas of the late 80s. The service area concept introduced in the late 80s also broke the relationships with some of the banks that had supported the societies. Secondly, fishing had undergone a transformation and most fishermen had started using marine plywood boats and out board motors pushing up the loan requirements to above the level for collateral-free loans. Thirdly, in some areas, the poor track record of SIFFS societies had also queered the pitch.

The district federations, which had the role of facilitating credit flow to the societies, responded by developing revolving funds (based on donor funds) and also put up collateral for getting bank loans for members. All this proved insufficient, especially in Kerala, as the societies were also facing competition from Government sponsored cooperatives, which were liberal with loans and subsidies without enforcing sufficient credit discipline. This led to a decline in the growth of the societies and even an erosion of membership in some areas.

It is in this context that SIDBI approached SIFFS with its pilot programme in microcredit. SIFFS, which had not considered credit as part of its portfolio of activities, decided to take the plunge. After a slow start in 1997, SIFFS has since 1999, been putting a lot of effort into its microcredit programme and has emerged as a leading MFI in the fisheries sector. Today it has a total loan outstanding of 2.2 crores and the portfolio is growing substantially each year.

Table 29: Summary of the differences between SIFFS and Most of the other MFIs.

Parameter	Most MFIs	SIFFS
Clients	**Predominantly Women**	**Primarily Men**
Local organisation	SHGs or Joint Liability Groups	Fish marketing society (commodity coop)
Loan amounts	Small: A few hundreds to few thousands	Larger: Rs.5000 to 50,000
Loan repayment	Fixed instalments, often weekly	Fixed percentage of income with high uncertainties and fluctuations in income
Loan period	Short term: 6 months to 18 months	Medium term: 3 years
Loan purpose	Significant percentage for consumption	Almost entirely for fishing equipment (productive purpose)
Interest rates	18-40% p.a; comparison with informal sector rates of 60% and above	16%; comparison with bank agri loans (12%) and Government coops (15%)
Interest spread	High	Low
Operating costs for credit	High due to sole focus on credit and associated activities	Low due to multiple activities and revenue generation from marketing and input distribution
Risk	Lower due to small loan size and effectiveness of peer pressure	High due to larger loan size and repayments dependant entirely on fortunes of fishing enterprise rather than peer pressure.

Matching Commodity Cooperatives with Microcredit Approach

The microcredit movement in India has a totally different orientation from that of commodity cooperatives, or for that matter, most types of coops[23] . Using small group dynamics to generate peer pressure, it has built up excellent credit discipline and shown remarkable results. It has shown that the poor are bankable and can be trusted to repay without any collateral security. However, the micro-credit systems and practices have taken on a distinct identity of their own. The SIFFS society model was in many ways different from the prevailing microcredit models. The following is a summary of the differences between SIFFS and most of the other MFIs.

It is possible that on some of the parameters, there are other MFIs that differ from the mainstream. For instance, Basix also goes for individual loans and larger loans while some MFIs lend for productive purposes rather than consumption. Still, taken overall, the SIFFS system is strikingly different from that of other MFIs. However, the difference in the model from the mainstream model is not by itself a problem as there are some successful models using totally different approaches. What is perhaps a bigger problem with the SIFFS model is that it has been developed in an earlier era when current microcredit principles and approaches were unknown and attitudes and values incompatible with microcredit had hardened over the years. Thus the challenge was to make the model compatible with microcredit and also to change the attitudes that were inimical to microcredit.

The important change made when SIFFS started its lending was to develop eligibility criteria for loans even though the loans were routed through the district federations and village societies. The societies and federations generally operated on the principle that any fishermen who sold his fish through the society and followed the other rules should be given a loan. However, given the wide variations in the income of individuals and their abilities, the loan repayment performance was not up to the mark. SIFFS introduced strict income criteria and tied loan amounts to repayment capacity rather than just need.

This would ensure that the loans will be repaid within the stipulated 3 year period even when the repayment was only a percentage of the income rather than a fixed monthly instalment. Another change was to make modifications to the principle of fixed percentage of income as repayment system. Societies with repayment problems were encouraged to either increase the percentage deducted for loan repayment or to make up shortfall in repayments by deducting additional amounts. For the record, SIFFS computed an EMI and used it as a surrogate for monthly demand even though the fisherman was not expected to remit an EMI. Using the EMI as bench mark, the performance of individual loans were tracked and action taken when it became clear that a member was not likely to repay within the prescribed term.

Source: *"Where PAR is a four letter word - SIFFS experiments with a rating system for member societies" (September 2002) by V.Vivekanandan*

6.10. Tailor portfolio quality measures, standards and provisioning norms to capture fisheries

Portfolio quality measures must be tailored to suit the capture fisheries context.

This also means that standard measures of delinquency like PAR > 0 days, PAR>30 days, PAR > 60 days, etc. will have to be adapted to the capture fishery context. Also, the focus on OTRR (ON-TIME REPAYMENT RATE) as a good indicator of Repayment/Portfolio Quality will need revisiting. Likewise, provisioning also needs to follow HISTORICAL DATA other than set percentages and the aspect of probability of loan write-off has to be verified, with regard to higher age past due loans.

Another issue here is the need to tailor the portfolio quality ageing classification.

[23] *The best integration of a cooperative structure with the principles of microcredit has been achieved by the Cooperative Development Foundation (CDF) in the form of thrift and credit cooperatives. The Mulkannoor paddy cooperative, the inspiration for CDF itself, is in many ways similar to SIFFS societies with credit for paddy growers recovered from marketing of produce. However, even CDF concedes that the Mulkannoor coop is difficult to replicate and has preferred to go in for the promotion of new thrift and credit coops.*

The traditional portfolio quality age classification is

0-30 Days	Past Due
31-60 Days	Past Due
61-90 Days	Past Due
91-180 Days	Past Due
181-365 Days	Past Due
> 365 Days	Past Due

This applies well to monthly repayment and one-year term loans. For weekly repayment and

one - year term loans, it may be useful to adapt this to 'payments skipped' as 30 days means 4/5 payments skipped. Likewise, the database of mainstream fisheries organisations like SIFFS/others needs to be studied carefully to adapt age categories for past due loans as well as ensure commensurate provisioning norms. This would entail data mining of large longitudinal databases with regard to aspects like the following:

1. How best to categorise past due loans when there is only notional repayment?
2. What is the most critical age of a past due loan – i.e, when it is good to be written off?
3. What percentage of written off loans (as per above criteria) are actually lost? And
4. And several other aspects like these.

Box 8: Where PAR is Four Letter Word

The biggest problem faced by SIFFS was to define delinquency, given its system of repayments linked to income. Fishing income is highly seasonal and variable. While there are distinct fishing seasons, they vary across regions. Moreover, the actual income variation depends on fishing technique used by the fishermen. In the same village, a fisherman using hook and line will have a different seasonality when compared to a fisherman depending on nets for fishing. Further, the actual fish availability during the different seasons varies from year to year making it difficult to work out a realistic demand schedule. It is normal even for good fishermen to have three to four months at a stretch when their repayments are below the EMI. However, there is also considerable amount of pre-payments in other months. Till recently SIFFS used its own judgement of individuals and societies to decide whether there was a repayment problem. No common objective criterion was used.

It is only at the time of credit rating by M-Cril in 1999 that Portfolio at Risk (PAR) was calculated to assess our portfolio quality. M-Cril used PAR at 60 days and found that it was around 40%. This was clearly a shocking figure and was at odds with what appeared to be otherwise a well-managed credit programme. We were not convinced that the PAR measure reflected the actual situation and felt that delinquency had to be measured differently in our case.

However, as we started to look deeper into the matter we realised that we do have a problem and it stemmed from our inability to define delinquency. Sometime towards the end of 2001, we started a detailed exercise of studying the behaviour of the PAR of our member societies as well as look into reasons why many members are lagging behind in repayment. The results were not easy to interpret. However, one thing became clear. PAR at 60 and 90 days was very much affected by seasonality and fluctuated wildly from month to month. It is only at PAR-180 that stability is achieved. We decided to use 6 months overdue as the most realistic definition of individual delinquency and use PAR-180 as the standard to assess the society and federation performance. Though PAR-180 may appear to be a liberal index by microcredit industry standards, we have decided to go by our own internal judgement on the matter (let us not forget that SIFFS loans are for 36 months rather than 12 months or 18 months). Possibly as the system stabilises and we have a more refined understanding of the factors that need to be manipulated to bring down PAR at 60 or 90 days, we can go for a more stringent standard.

The society rating system

As we started understanding the importance of PAR and found that it is the measure that financing institutions and rating institutions give importance to, we decided to make it the single measure to assess our portfolio quality. Being a three tier cooperative organisation of fishermen, we realised that the whole idea needs to be internalised at all levels. To achieve this we decided to get the federations and societies to be aware of their PAR-180 figure and to work on reducing it. We also decided to link the lending policy to a society's PAR-180.

What emerged in the process was a society rating system based on PAR. Based on an analysis of the PAR figures the prevailed in December 2001, we worked out the following system.

Rating	Criteria	Credit policy
A+	PAR90 = 0	No restrictions on credit flow. Cash award if consistent over a year
A	PAR180 = 0	No restrictions on credit flow
B	PAR180 < 10% Or <15% of borrowers have more than 6 months arrears	Credit flow initially normal subject to credible plan for reducing arrears; subsequently will depend on improvements shown
C	Number of borrowers with 6 months arrears >15%<50%	Only repeat loans. No loans to first time borrowers
D	> 50% of borrowers having 6 months arrears	No loans. Has to improve to C to get loans

It is however obvious that though we started with PAR of a society as the main measure to define performance, we have developed another measure to assess the societies. This is the percentage of members who have arrears of more than 6 months. This is perhaps an important measure for a people's organisation. The percentage of delinquent members is a measure of the effectiveness of peer pressure and control the society has over its members. A danger with depending on PAR is that it can be distorted by just one or two members who have had a fishing failure and this can be a discouragement for a society which has otherwise a good hold on its members.

An important point to note is that the rating system is valid only when a society has at least a one-year track record and new societies cannot be immediately rated.

People's response

The PAR- based rating system is in place now for a little less than a year and it has been found useful. The concept has quickly taken root even if the members only have a superficial understanding on how PAR is calculated or what it really means. However, for the staff at all levels, a systematic training programme with the help of EDA Rural has helped to generate good awareness. The federations, which have their own revolving funds, have started applying the PAR concept as well as the rating system to their own portfolio.

The most encouraging response has been from societies that are already better than others. Those who have received a rating of B have worked on improving it to 'A' and those who have got 'A' have tried to move to 'A+'. For the better societies and their leaders, it has become a prestige issue to do better than the other societies. To generate this competitive feeling, each month the society ratings are circulated to all societies.

However, the rating system has had only a limited impact on those with C and D rating. Except for one society that managed to jump from D to A in six months, most societies with C and D rating grumble about the rating system. *For these societies, PAR has become a dreaded term. It is not just a harmless three-letter word but the equivalent of a four letter insult!* Obviously it takes more that a mere rating system to solve their delinquency problems. We are working on a package of measures that will help these laggards to also improve.

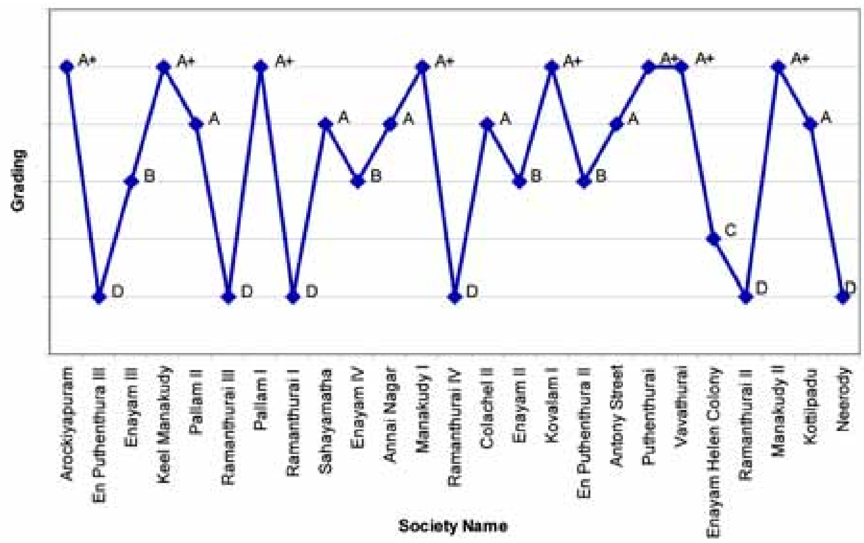
Source: *"Where PAR is a four letter word - SIFFS experiments with a rating system for member societies" (September 2002) by V.Vivekanandan*

A sample grading reporting from the SIFFS MIS[24] is given below:

Table 30: SIFFS Grading Report

			Delinquent Members				Past Due Amount			
SL. No.	Society	OS Loans	3 Months	6 Months	%	OS Amount	3 Months	6 Months	PAR 180	Rating
1	Arockiyapuram	27	0	0	0	989874	0	0	0	A+
2	Vavathurai	18	0	0	0	336061	0	0	0	A+
3	Kovalam I	18	0	0	0	364511	0	0	0	A+
4	Keel Manakudy	27	0	0	0	426193	0	0	0	A+
5	Manakudy I	17	0	0	0	271219	0	0	0	A+
6	Manakudy II	22	0	0	0	533091	0	0	0	A+
7	Pallam I	38	0	0	0	793642	0	0	0	A+
8	Puthenthurai	1	0	0	0	21183	0	0	0	A+
9	Nadu Muttom	42	0	0	0	814039	0	0	0	A+
10	Colachel I	31	0	0	0	523325	0	0	0	A+
11	Kodimunai	32	0	0	0	503411	0	0	0	A+
12	Keel Kurumbanai	19	0	0	0	258891	0	0	0	A+
13	Mel Midalam	38	0	0	0	757730	0	0	0	A+
14	En Puthenthura V	3	0	0	0	21081	0	0	0	A+
15	Mulloorthurai	2	0	0	0	50048	0	0	0	A+
16	Chinnathurai	6	0	0	0	123735	0	0	0	A+
17	Vallavila I	30	0	0	0	911960	0	0	0	A+
18	Vallavila II	14	0	0	0	276113	0	0	0	A+
19	Marthandamthurai	3	0	0	0	43147	0	0	0	A+
20	Puthoor	9	0	0	0	41835	0	0	0	A+
21	Arockiapuram II	54	0	0	0	746761	0	0	0	A+
22	Vallavila III	13	0	0	0	301633	0	0	0	A+
23	Manakudy III	4	0	0	0	79256	0	0	0	A+
24	Mel Muttom	37	0	0	0	1367685	0	0	0	A+
25	Mel Muttom II	36	0	0	0	1780828	0	0	0	A+
26	Mel Muttom III	37	0	0	0	1489996	0	0	0	A+
27	Kadiapattanam	12	0	0	0	136873	0	0	0	A+
	Outstanding Portfolio					**13964121**				

Figure 32: SIFFS Societies grading report sample



[24] *MCG Creditwise software Data*

6.11. Support Diversification in Capture Fishery through Innovative Priority Sector Financing

There is still unexploited potential in the offshore waters (longline shark and tuna fishing, for example). Finance must support diversification into these aspects through innovative financial products (and carefully framed pilots), covered under Priority Sector Financing.

Financial instruments (soft loans, equity, risk covers and insurances) along with financing for other inputs (research, training, infrastructure support, information and market intelligence, safety measures, etc.) should be used to encourage the more enterprising of the fishers to diversify from inshore to the offshore waters.

Diversification of capture fisheries (hook and line, off shore long line) is particularly important from Kollam up north along the west coast, where there is heavy dependency on gillnets, purseiners and ring-seines for pelagic fish. Due to overexploitation, the market networks are not able to respond to the large supplies and prices of sardines has been crashing. This will have severe FINANCIAL implications for the survival of gillnet fish workers, particularly of central and north Kerala.

Mari culture, production and harvesting of sea weeds, plantations along the coast (bio-shields), forest covers can provide gainful employment opportunities and avenues (especially along the Tamil Nadu coast). Financing of these requires an ‘experimental’ approach and banks and Financial Institutions would have to be innovative in supporting and lending to these Innovations/Pilot tests.

6.12. Make post-harvest fishery a thrust area for financial institutions

Small-scale fishery is being sustained despite falling catches and increasing operational costs because of the high demand for fish in the export and domestic markets. This has made post harvest fishery interventions and financing of aspects related to it extremely important.

The major players here are the primary producers, exporters, merchant moneylenders, their agents, women in peeling sheds, operators in the domestic transit and terminal markets (larger trade loops), women fish vendors (fresh, dry and pickled) and cycle/scooter/three wheeler vendors (smaller trade loops) and now cold chain networks supplying processed and branded fish to the up markets[25] .

There is a need to strongly finance storage and holding facilities (ice, iceboxes, storage facilities) so that producers can negotiate better market prices. Such entrepreneurial units can also provide services such as floor prices, market intelligence and credit against fish held in stock and even market “futures”, especially in partnership with exporters, banks and whole sale merchants. The traditional Microfinance approaches using SHGs/JLGs could also be tried here as delivery mechanisms.

The use of warehouse receipts has been largely successful worldwide (Please see **box on the next page** and **Annex 12**) in reducing vulnerability. There is no reason to believe that it will not succeed here as well.

Women can be organised for value addition and processing, so that apart from retaining women in fishing, even younger and educated women can find employment spaces and entrepreneurship opportunities in post harvest fishery.

Leasing of existing post harvest facilities to producer groups and/or private entrepreneurs should be facilitated. Different model(s) that will help in reducing risk/vulnerability for the fisher’s should be tried out. The fishermen/women can use a variety of storage facilities on rental pay per view basis – same has been done in Manipur/Tripura/China by community and private entrepreneurs and it could be tried here.

More imaginative partnerships with cold chains and retail outlets need to be explored by producer organisations and others. For this, financing for such Warehouses/post harvest/cold storage/transport facilities should be classified as eligible under priority sector lending by RBI. There could also be special norms for infrastructure development and supported whole heartedly by commercial banks.

The support of NABARD and State Govts would be critical in this regard as the prior Government of India scheme with NABARD Subsidy ended in March 2007. This would have to be extended again. A special request needs to be made to Ministry of Finance (MoF) and NABARD in this regard.

---

[25] *Please see Case Study of Cycle Vendors given in* ***Annex 6***

Fish producers and warehouse receipts

"Experience from around the world illustrates that warehouse receipts can make a difference to producers. By storing their goods in a reliable warehouse until the price increases while using the goods as loan collateral, producers may access funds before they sell their goods. Warehouse receipts are often administered to producer groups, instead of individuals, which helps the flow of market information. Warehouse receipts also can create price transparency. This empowers producers to make informed sales decisions rather than waiting for "gate" buyers who often offer below-market prices.

Producer ogranisations/Microfinance institutions (MFIs) also have a strong incentive to offer warehouse receipt financing. With this system, their risk is reduced because the system has a built-in use of collateral that can retain a high commercial value and be liquidated quickly."

Figure 33: The general warehouse receipts financing process[26]

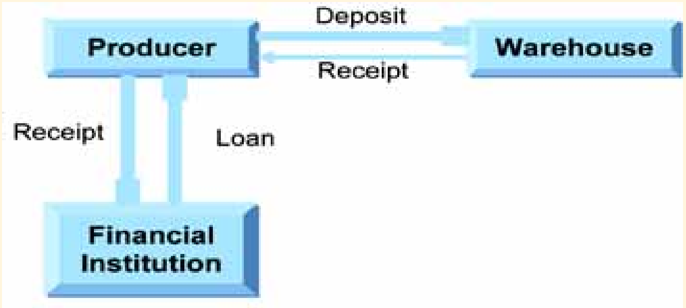
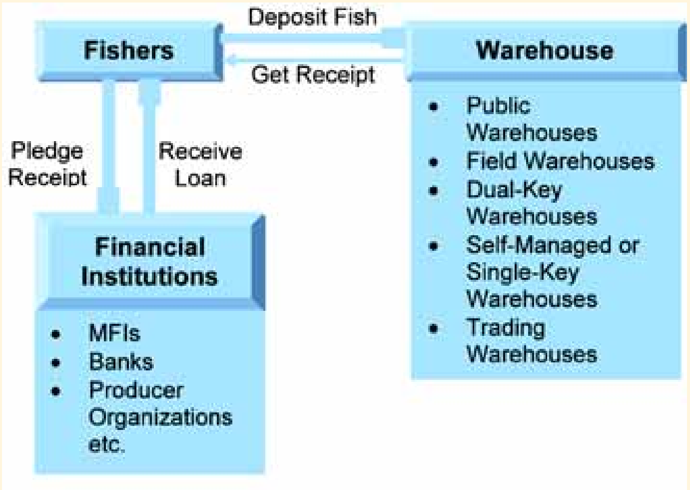


Figure 34: The warehouse receipts financing process in fisheries



[26] *Source: Adapted from "Bamako 2000 "Technical Note 5: Innovations in Microfinance"*

Steps in Warehouse Receipts Financing

1. Warehouse receipt financing is the use of securely stored goods as loan collateral.
2. It allows producers to deposit a finished good or agricultural product in a secure warehouse where the producer receives a receipt certifying the deposit of goods of a particular quantity, quality, and grade.
3. The producer can use the receipt as a form of portable collateral to request a loan from a financial institution such as a bank or an MFI or Producer Organisation.
4. There are typically three parties involved in warehouse receipt financing: the bank/MFI/ Producer Organisation, the producer, and the warehouse.
5. The producer identifies a warehouse and takes his or her goods to the warehouse for deposit. The warehouse operator grades and classifies the goods and gives a receipt for storage of said goods to the producer.
6. The producer then takes the receipt to the MFI and, based on projections of the goods' market value, the MFI gives the producer a loan.
7. The loan is extremely flexible as it allows the producer to spend it to finance expansion activities, pay off debts, or use it for any other reason.
8. Warehouses can be either open to the producer, allowing the producer to withdraw produce at any time, or sealed, so the producer cannot access produce until a predetermined date.
9. If the produce is withdrawn, the producer must repay the bank for the loan–principal and interest–and the warehouse operator for any storage fees.
10. Alternatively, the producer may use the warehouse as a channel for selling the goods, in which case the goods are released to the buyer, the loan and fees are deducted from the selling price, and any remaining profits are released to the producer.

Source: Adapted from Bamako 2000 "Technical Note 5: Innovations in Microfinance"

6.13. Classify Supplies by Fishers as Deemed Exports

Specifically, producer organizations should be eligible for packing credit type of working capital and other infrastructure credit etc, much like marine exporters are being financed. Special loans (and tie-ups with exporters) could be provided to intermediary/producer organizations like SIFFS. Especially, when they supply to exporters or large processors (and product is traceable), this could be classified as DEEMED Exports and credit for working capital could be provided, much like packing credit. Please see for packing credit circular (RBI Website: http://www.rbi.org.in/scripts/BS_CircularIndexDisplay.aspx?Id=1848) Export Credit - Circular (http://rbidocs.rbi.org.in/sec14/32421.pdf). Aspects of traceability of-course would have to be attended to and these are given in **Annex 9.**

RBI Data on Marine Exports

Table 31: RBI Data on Marine Exports (US $ million)[27]

		April-September	
Commodity Group	2004-05	2005-06	06-07 P
Agricultural & Allied Products	3,628.5	4,504.3	5,582.4
1. Tea	201.4 (%)	194.1	226.4
2. Coffee	114.3 (%)	181.1	230.1
3. Rice	500.1	692.6	700.1
4. Wheat	226.5	111.0	6.1
5. Cotton Raw incl. Waste	47.4	131.6	346.8
6. Tobacco	132.8	145.3	193.0
7. Cashew incl. CNSL	240.7	314.2	271.6
8. Spices	209.4	230.3	308.6
9. Oil Meal	306.1	307.3	369.5
10. Marine Products	557.0	738.2	771.9
11. Sugar & Mollases	15.8	16.0	511.7

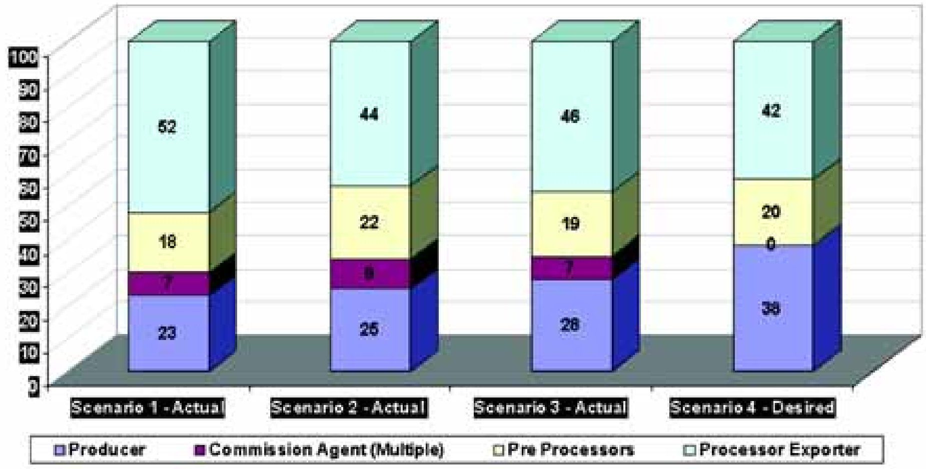
[27] *Source: RBI Official Documents (2007)*

As RBI data shown above indicates, Marine products account for the largest group of Agriculture and Allied product exports.

6.14. Supply Chain Financing

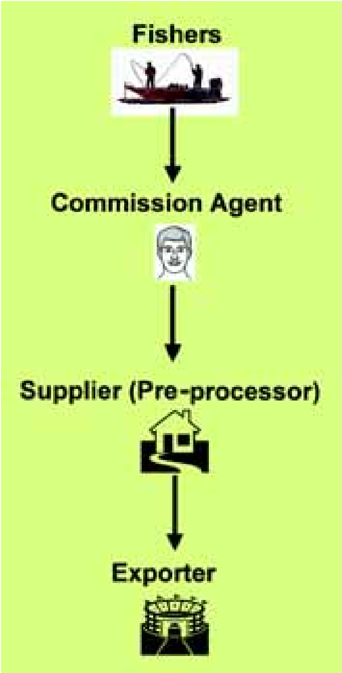
	Producer	Commission Agent (Multiple)	Pre -Processors	Processor Exporter
Scenario 1-Actual	23	7	18	52
Scenario 2-Actual	25	9	22	44
Scenario 3-Actual	28	7	19	46
Scenario 4-Desired	38	0	20	42
Compiled from Ministry of Commerce Data and Other Sources				

Figure 35: Supply chain financing



6.14.1 Role of Supply Chain Actors[28]

As the supply chain (margin) data indicates, "the fishers are price takers since the price of fish moves from the international market via the exporter to the lowest actor in the chain – the fishers. The fishers are also the risk bearers; they bear all fishing expenditures and assume the risk of a poor catch. Fishers are also the primary group affected by government regulations such as annual fishing bans. Besides, fishing is a full-time profession, and fishers do not have any alternate source of income generation".



[28] *Apart from the field survey, this sub-section uses and quotes with adaptation, material and research conclusions given in Parashar Kulkarni, (2005). "The Marine Seafood Export Supply Chain in India: Current State and influence of Import Requirements".*

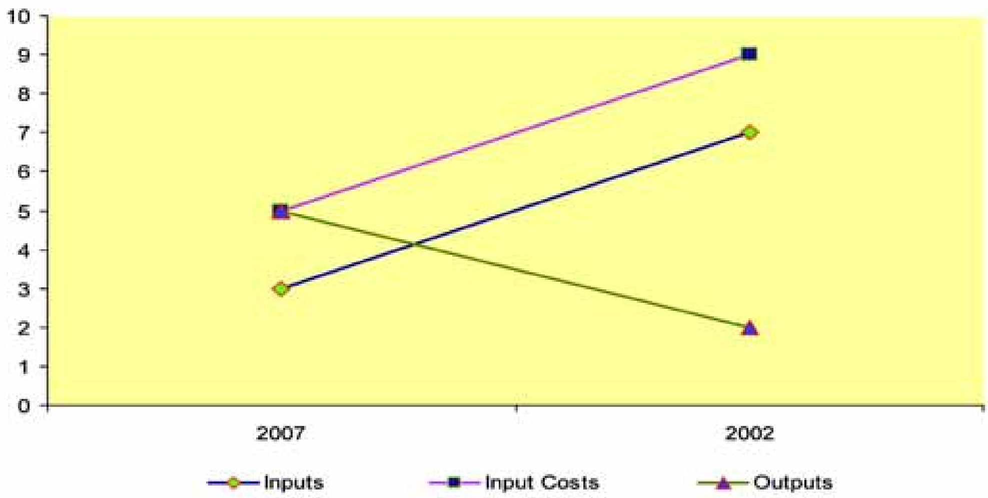
The fisheries export supply chain in genereal[29] in India, comprises of:

Table 32: Fisheries Supply Chain[30]

Fisherman	Commission Agent	Supplier	Exporter
Input procurement: diesel, ice, food, nets, boat, 4–7 helpers	Receive fish from boat	Receive fish from agent	Receive fish as raw material
Undertake fishing trips	Weigh fish	Stock fish in crates filled with ice	Wash with potable water
Classify caught fish as per fish category	Grade fish as defective and non defective	Sort fish in grades as per quality standards	Process using Hazard Analysis and Critical
		of exporter	Control Point (HACCP)[31] procedures
Store fish in ice	Negotiate price with fishermen and supplier	Transfer fish to pre-processing unit	Pack processed fish
Unload fish on docks after preliminary wash	Finalise price with fish supplier	Clean fish	Perform export procedures and dispatch
Negotiate with agent and receive money	Receive fish from boat	Receive fish from agent	Receive fish as raw material

As noted earlier in this report, finance alone cannot make a significant dent into poverty reduction, especially for capture fisheries. It can however play a very critical role in Capture Fisheries - which is witnessing a down ward trend in catch, profitability, returns to fishers etc - by innovative financing. This can be done by lowering input costs through making finance available to intermediaries/Producer Organisations at the same cost as had by exporters of marine products and/or cash flow based financing. Thus, finance can serve to alleviate the plight of fishers/reeling under the impact of higher inputs, higher cost and lower output prices (please see **Figure 36** hereafter). Along with poor price, the following aspects have made life very difficult for fishers: (1) Rising input (2) Higher input cost (3) lower outputs.

Figure 36: Input, input costs and outputs



[29] *This is general model which holds goods by and large, although there are some variations*

[30] *Source: Quoted with adaptation from Prashar Kulkarni, (2005) 'The Marine Seafood Export Supply Chain in India: Current State and Influence of Import Requirements*

[31] *Hazard Analysis and Critical Point (HACCP) is a quality management system which identifies and evaluates points during production in order to set up measures and control hazards to ensure product safety.*

Box 9: MPEDA – Focus on exporters, not fishers[32]

Export promotion agencies concentrate on assisting exporters. With a population of approximately 1.5 million fishers in India compared to barely 1,200 exporting units with .05 million workers in India, central government outlays in India clearly favour exporters over fishers.

A study of the subsidy and promotion schemes of MPEDA reveals that among 40 schemes listed, only one is targeted at fishers. It provides for a maximum of 30 per cent investment assistance, subject to a Rs.50,000 cap for equipment installation in mechanized fishing vessels. On the other hand, exporters receive assistance for promoting exports, hygiene and sanitation, research and development, and acquisition of machinery. Thus, in the complete supply chain, exporters receive most subsidies and government assistance, while fishers appear to receive the least.

Although export promotion expenditure may be justified by trickle-down effects, the investment on downstream actors, namely the fishers, has to be increased. This is where FINANCE can play a major role and extending packing (working capital) credit to producer organisations is a strategy recommended as part of Priority Sector Financing. This must be supported whole-heartedly by NABARD.

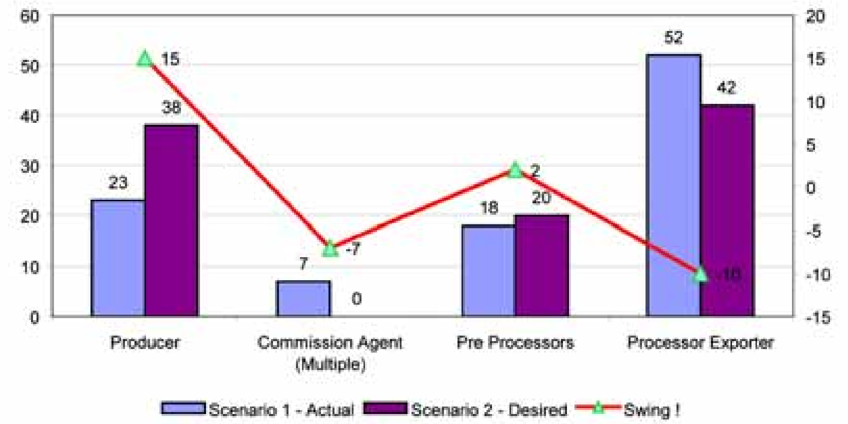
NABARD should also provide working capital/other loans at packing credit interest rates to producer organisations like SIFFS – especially, if the produce is traceable as going to exports (Deemed Exports). NABARD could also refinance such loans

"Also, fishers and other workers at the bottom of the chain are not trained in fish hygiene and handling methods. However, the state of goods handling and hygiene within exporting firms is adequate. Further, most ports lack adequate hygiene facilities and in general all ports are in a poor state of sanitation and hygiene. Most-constructed ports are also inadequately equipped, in terms of facilities at landing centres namely, clean water, clean ice, clean elevated display platforms[33]". Soft loan financing (at concessional Interest Rates) for such infrastructure and capacity building as above may also be considered as priority sector lending and encouraged by RBI."

6.15. Finance Projects to Reduce Length of the Value Chain

The fisherman's share in Rs.1 of fish is between 32%-45%, by and large and it could vary across different markets and places. Clearly, as noted earlier, value can be added by financing infrastructure for cold storage/wholesaling /transport and other vulnerability reducing mechanisms that can help them get post harvest loans and/or reduce the perishability risk. However, the marketing process is also inefficient with several layers of intermediaries – facilitating consolidation of intermediaries or by-passing one/two of them could lead to more value for fishermen, more stability in their cash flows, and quicker turn around in accounts receivable. Commercial banks need to whole heartedly finance innovative approaches to reducing the length of the value chain, especially through producer organisations like SIFFS. Please see **Annex 3** for market data on this aspect. As graph below indicates, scenario 2 is desired as opposed to scenario 1 as it adds considerable value to fishers.

Figure 37: Fisheries supply chain



[32] *Source: Quoted with adaptation from Prashar Kulkarni, (2005) 'The Marine Seafood Export Supply Chain in India: Current State and Influence of Import Requirements*

[33] *Source: Quoted with adaptation from Prashar Kulkarni, (2005) 'The Marine Seafood Export Supply Chain in India: Current State and Influence of Import Requirements*

Figure 38: Variety of fish market data in Nochikuppam

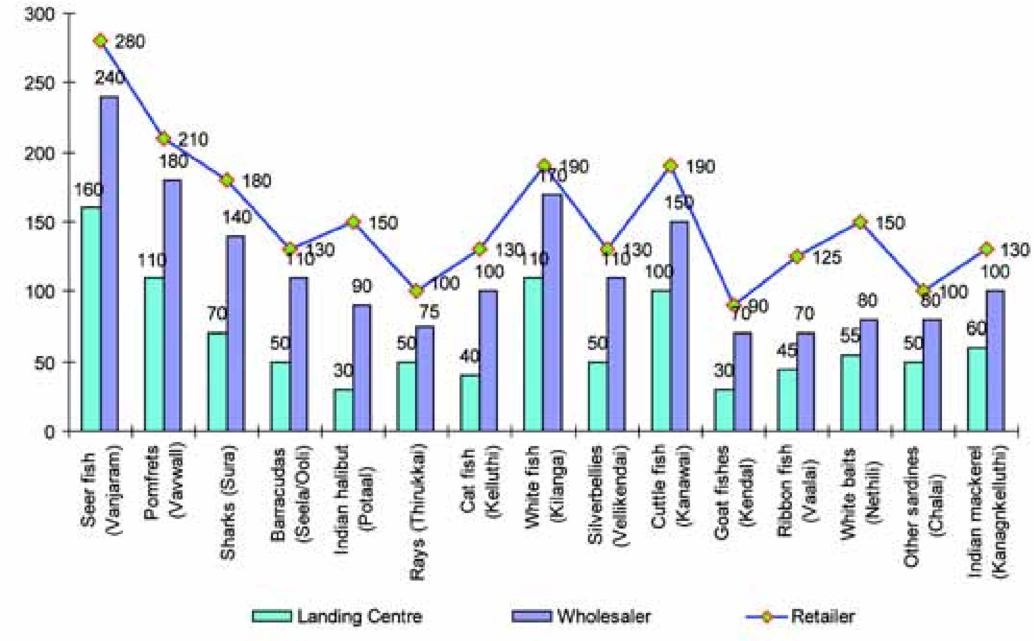
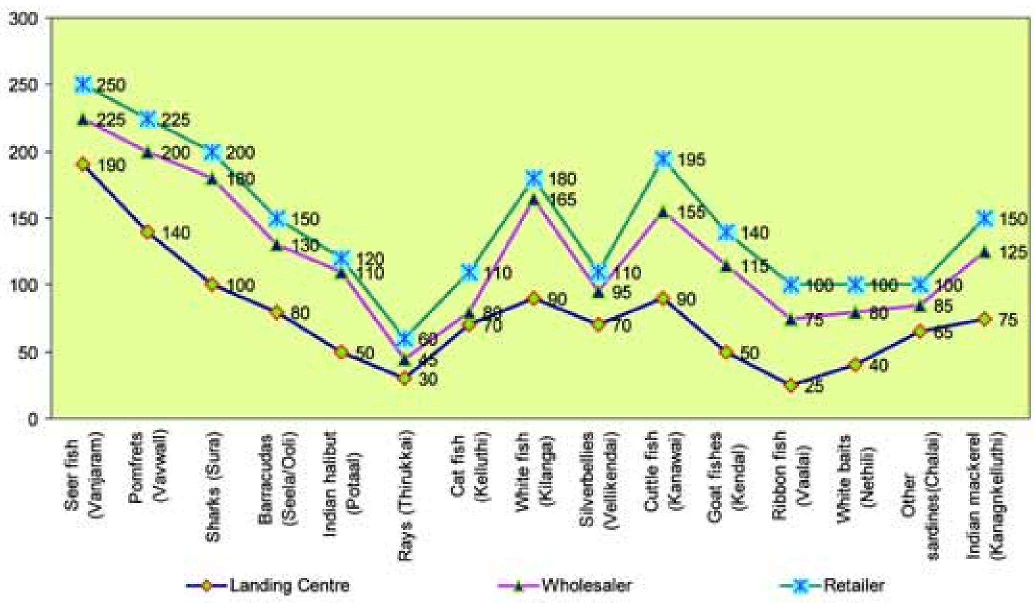


Figure 39: Variety of fish market data in Pattinapakkam



6.16. Innovative Financing for Fisheries Including Under Priority Sector

All of these could be classified as Priority Sector Financing and encouraged

a) Special loan for Disinvestments/Downsizing

- *Disinvestment Financing*: Owners of trawlers/other large boats who wish to replace their boats/ craft/equipment should be given finance to enable them to diversify (their occupation and livelihoods) - this has been done successfully in parts of Africa, China and USA in other sector(s). This should help in reducing over-capacity, particularly in the mechanized sector. This may be classified under Priority Sector Financing.

- *Downsizing Loans*: For the ring seines and large canoe boats, special (incentive) loans may be given to help them to change to smaller crafts and more sustainable practices. This also may be classified under Priority Sector Financing.

Box 10: Fishers Need To Manage/Conserve Their Own Resources[34]

"The issues of community based fisheries management, credit access and business support for fish products along with potential for enhancement and diversification of fisheries based livelihoods is being addressed by FAO through three pilot projects and three studies.

One project launched by South Indian Federation for Fishermen Societies (SIFFS) recognises fishermen as the primary stakeholders to decide on fisheries management. In Kerala, in the area of Allapad, three institutions, the elected panchayat, the traditional karayogams (local community institution) and the ring seine (a exploitative net) operators association have agreed to restrict new entry of tanguvallams (large plank built boats operating the ring seine) and to downscale the capacity gradually. The state level meetings of the trawler, the ring seine and traditional fishermen groups of Kerala have recognised the need to restrict new entry of both new boats and fishermen into fishing as well as the proactive role in fisheries management they need to take. The trawler group (the major mechanised fishing group) has even proposed shift of the ban on fishing during monsoon from November to February or even a second ban period each year to save juvenile fishes being caught. Though scientists and experts are involved, much more has to be done to have a wider consent at all levels to take practical steps.

In Tamil Nadu, traditional panchayat leaders of 56 villages in the districts of Nagapattinam and Karaikal agreed that ring seine operations and the pair trawl operations have to be regulated. Some fishermen catch maximum fish at others' cost and are hence affecting the market. To enforce restrictions, cooperation of the Government has to be sought. However, reduction of the fleet as well as fisheries management measures might have implications in Tamil Nadu, since many people depend on fishing for their livelihoods. A study in the Palk Bay area of Tamil Nadu on the possibility of trawler fleet reduction and its implications on livelihoods has been taken up by the Centre for Economic and Social Studies along with SIFFS and the Maritime Institute, Netherlands".

b) Special loan for Merchant Traders

- It is critical to find financial products/investment that can make the merchants/traders more efficient and/or reduce the risks for them so that they increase price to societies/fisherfolk and also reduce lead time for settlement of payables
- *Special Credit Limits could be provided* to merchant traders and other(s) through producer organizations that can help them reduce their accounts receivable turnover with fishermen's societies. This will go a long way in reducing delinquency and also ease flow of cash to the fishers.
- *Incentive Loans* to merchant traders to enable them to lend at lower than their higher (normal) rates but at viable rates – this has been done quite successfully in many areas. Again this could be tried with/through producer organisation like SIFFS, which could work out a credit line for trader merchants along with norms/terms for lending.

c) Flexible loans for Fishermen

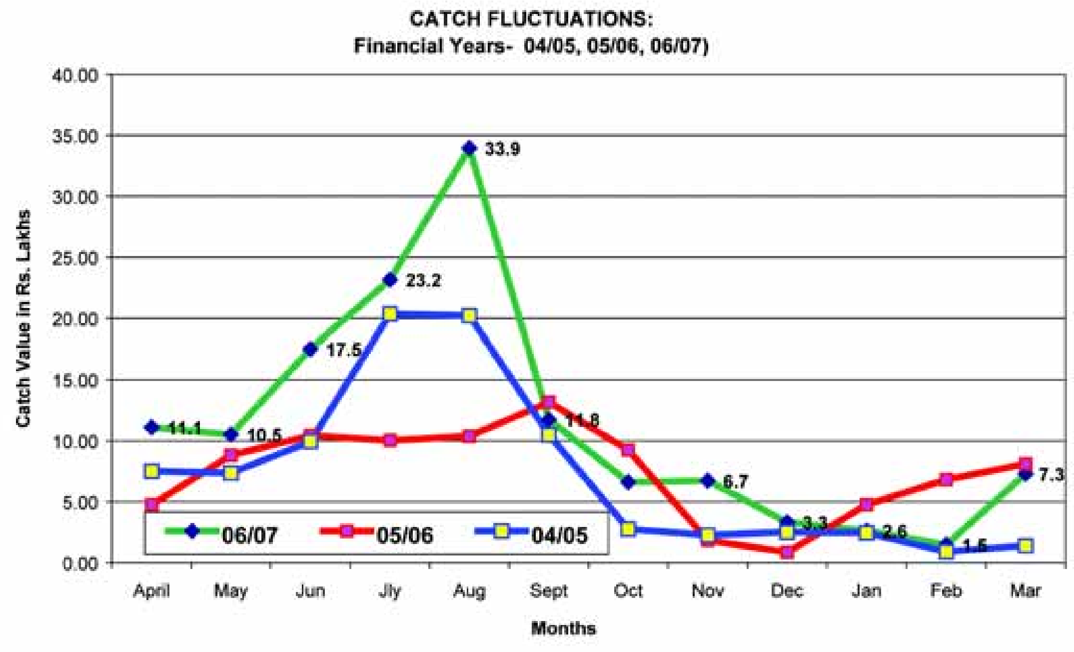
- *Cash Flow Based Financing for Harvest Fisheries*: To create a lending program in association with bank/financial institution/Producer Organisations wherein the loan is structured to factor in "payment holidays" during the lean period when the earnings are impacted – (monsoon time/ breeding months, when Govt imposes ban on fishing, etc). This calls for cash flow based financing with repayment holidays on principal/interest and a lot of flexibility in repayment. Such a product could be piloted for harvest fisheries through producer organisations. This again could be classified as Priority Sector Financing
- *Debt Swap*: Initially to look at debt replacement/ consolidation - repaying high cost loans with low cost loans. This will enable fishermen to lower their interest burden, which in turn will improve

[34] *Source: Quoted with adaptation from "Progress Report UNTRS, (2007)"*

their cash flows and also ability to make timely repayment of other loans and also give them discretionary income. This could be classified under priority sector financing.

- *Flexible Credit Limits for Enterprising Owners*: As far as responsible and enterprising owners are concerned (graded on fishing asset value, average monthly catch across three years, average bills written, savings and extent of loan repayment - please see below), they could have access to flexible and fungible working capital loans (working capital limit can be fixed each year). Thus, Credit limits may be offered to high performing units, on a yearly basis – this could also serve to incentivise units to graduate upwards. Once these persons have established good relationship they can be also supported with a larger basket of credit (housing, education, household equipments and amenities consumption financing). Here again pilots could be tried through producer organisations and all of these may be classified under Priority Sector Financing. Please see **Annex 7** for an example of the same in case of units from Pallithottam (SIFFS Society) over 3 years for several members.

Figure 40: Average catch fluctuation for teh financial years – 04/05, 05/06 and 06/07 - Pallithottam



d) Special Loans for Women

- *Individual Lending to Women*: Women handle the cash in the household and manage the running of the house in a very professional manner and hence, can be lent to individually. Vocational centres are needed to train and help women diversify into livelihoods like - handicrafts, tailoring and embroidery, agarbatti making, etc. These women must be encouraged and enabled to INDIVIDUALLY set up small scale business units - like grocery shops / trading in commodities etc, to generate cash profits and thereby enhance household earnings. Mentors and financing is crucial for this. Hence, one could provide women with small INDIVIDUAL loans, for them to become/scale-up as Micro-entrepreneurs and thereby enhance household earnings. Mentors could be identified and capacitated through producer organisations, NGOs etc. Individual loans are very successful today and these could be provided to them under Priority Sector Lending

e) Special Products for these Crew

- *Special Loans for Crew*: Crew loans can be delivered through adapted group methodology.

(i) Start with savings, understand their transaction behaviour and then perhaps lend them money.

(ii) Crew members need to be encouraged to save part of their earning and as incentive savings based life and health insurances, pensions etc. could be put in place.

(iii) Later, they could have access to education and other loans based on their share earnings (good worker) and extent of savings.

Table 33: FMC Pallithottam - Grading Of Members As On 31 MARCH 2007

Sl. No	Name	Total (36 Months)		Monthly Average		Annual		Grading
		Bills	Catch	Bills	Catch	Bills	Catch	
1	Thomas P	373	822586	10	22850	124	274195	D
2	Anthony A	230	379380	6	10538	77	126460	xx
3	Joseph Albert	603	1939535	17	53876	201	646512	A+
4	Xavier J	194	607900	8	25329	97	303950	C
5	Solomon A	241	407630	7	11323	80	135877	xx
6	Celestine M	523	1771040	15	49196	174	590347	A+
7	Michael B	466	1104615	13	30684	155	368205	B
8	T.Joy	347	1156725	10	32131	116	385575	B
9	Stephen Pius	473	1337740	13	37159	158	445913	A
10	Francis O	330	784590	9	21794	110	261530	D
11	Jerome T	355	717110	10	19920	118	239037	E
12	Joseph Vincent	312	758230	9	21062	104	252743	D
13	Kunjumon G	178	316360	5	8788	59	105453	xx
14	Kunjappan L	287	958940	8	26637	96	319647	C
15	Stephen Julian	505	1809455	14	50263	168	603152	A+
16	Gilbert T	245	454335	11	19754	128	237044	E
17	Stephen Johnson	230	269235	6	7479	77	89745	xxx
18	Cletus Albert	407	830780	11	23077	136	276927	D
19	Cletus Alphonse	357	1029770	10	28605	119	343257	C
20	Cletus Raimond	294	701905	8	19497	98	233968	E
21	Baiju G.	294	345680	8	9602	98	115227	xx
22	M. Ambrose	566	1859480	16	51652	189	619827	A+
23	Kamance P	275	492450	8	13679	92	164150	x
24	Xavier A	155	451630	4	12545	52	150543	x
25	Alphonse J	438	1200090	12	33336	146	400030	A
26	Francis E	397	1066575	11	29627	132	355525	B
27	Raimonds A	359	880030	10	24445	120	293343	D
28	Johny G	361	791340	10	21982	120	263780	D
29	Pancras V	438	1039625	12	28878	146	346542	C
30	Peter J	352	936880	10	26024	117	312293	C
31	Nelson S	345	539560	10	14988	115	179853	x
32	Manoj R	276	663250	8	18424	92	221083	E
33	Cletus Joseph	356	502650	10	13963	119	167550	x
34	Stephen S (Union)	456	1200800	13	33356	152	400267	A
35	Alexander M	95	256465	7	18319	81	219827	E
36	Terrence J	140	349310	7	16634	80	199606	x
37	Valerian Albert	283	597880	15	31467	179	377608	B
Total		**12536**	**31331556**	**369**	**918883**	**4425**	**11026591**	
Average Per Member		**338.81**	**846798.8**	**10**	**24835**	**120**	**298016**	
Mode		**566**	**1939535**	**566**	**1939535**	**17**	**53876**	

- SHG (DHAN) methodology or Solidarity Group (ICNW) methodology could also be adapted and tried in this regard. The group methodology has been used world wide with similar workers. These could also be classified under priority sector financing.
- *Innovative Risk Management Products for Crew:* Accident /death at sea/work cover should be ensured through a master policy with each owner (unnamed crew cover introduced by SIFFS is an example) but useful riders on critical illness and other aspects could be added to make it more useful. IRDA needs to be sensitised in this regard and special permission obtained for the same. For sample policy at SIFFS **Box 11** below.

Box 11: South Indian Federation of Fishermen Societies (SIFFS) Unnamed Crew Insurance

As part of social security initiative of SIFFS, the Un named crew members insurance policy for the fishermen community has been designed in collaboration with United India Insurance Company. It is an exclusive insurance product offered for the crew members of the fishing boats. It has been introduced for the members of SIFFS in February, 2006. In this not for profit 'partner – agent model', SIFFS acts as a Nodal Agency on behalf of the insured members.

Features of this policy

1. Objective

The policy is aimed to protect the lives of fishermen who are the crew members (labour) of the artisanal fishing crafts.

2. Eligibility

All the crew members (as a crew unit) who associate with the member (craft owner) of primary societies of the SIFFS are eligible. Policy is taken in the name of craft owner only.

3. Risks covered

- Accidental death at sea or seashore only.

  (Maximum 5 members are allowed per crew unit)

4. Premium

- Yearly premium for 5 crew members is Rs.150 plus 12.24% service tax which, is equivalent to a sum of Rs.168.36 to be paid by the craft owner. (Rs. 33.6 would be the premium amount per crew member).

5. Sum assured

- In the event of death an amount of Rs.50, 000/- per head is payable.

6. Membership enrollment

- The primary societies of SIFFS are the primary stakeholders in the process of registering the members through a joining form of membership details of the policy holder (craft owner). The societies also look after the payment of premiums on scheduled dates. Through the respective federations and SIFFS, the societies forward the list of members to the Insurance Company which would also be recorded in the MIS at SIFFS.

7. Claim procedure & Claim settlement

- In the event of death of crew members at sea/sea shore, the respective society should inform SIFFS as soon as possible within one or two days for immediate arrangements. Documents like FIR, claim proposal form, Post-mortem Report, Death Certificate to be submitted by the claimant within one week. On acceptance of complaint, the SIFFS contact UIIC to conduct survey for confirmation of the event with a proper certification from the society committee and federation. After confirmation and finalization of reports, the claim would be settled within one month. Since it is an unnamed policy, for verification purpose of insurance company, each member should compulsorily maintain a note book (Register) at his home for entering the names of their crew members on all working days.

- *Micro-pensions with flexible payment options* through linkages to UTI Mutual Fund (or Others) could be designed and delivered for coolie's.

Box 12: Micro-Pensions for Coolies

A micro-pension scheme is typically designed as a defined contribution scheme. The scheme essentially operates on the principle of voluntary savings accumulated over a long period. These savings are intermediated through financial and capital markets by a professional fund manager. At an agreed upon withdrawal age (usually 58 or 60 years) the accumulated balances can be withdrawn in a lump-sum, a phased withdrawal, annuity or some combination of these methods.

In India, the insurance companies and two mutual funds have been offering pension plans for individuals for a considerable period. However only one mutual fund, UTI AMC (Asset Management Company) which is in the public sector began offering plans in 2006 which can be loosely termed as micro-pensions. The key characteristic of the UTI AMC micro-pension plans are small sum's (ranging from Rs.50 to Rs.200 per month); flexibility in payments (monthly or yearly contributions are not mandatory), and presence of a third party, such as cooperative, self help group (SHG) or an NGO. The non-mandatory nature is an important departure from the traditional pension plans.

Source: *Compiled and Sourced from "Time to Mainstream Micro-Pensions in India" by Mukul G Asher*

6.17. Capitalize and Capacitate Producer Organisations/MFIs/RFIs

Producer Organisations/MFIs/RFIs should be capitalized and capacitated so that equity investment can occur in these along with a package of (institutional) systems support, training, MIS and other aspects. Without equity, producer organisations/MFIs/RFIs cannot access low cost money – many producer organisations/MFIs/RFIs are over leveraged and with the recent outsourcing guidelines that call for critical functions not to be outsourced and also preparation for adoption of BASEL II underway in India, loans to producer organisations/MFIs/RFIs would be difficult to come by in the future.

Products similar to the quasi equity (transformation loan) product of SIDBI could be developed for Producer Organisations//MFIs/RFIs with exit routes for investors. Quasi equity investment and flow of loans to good intermediaries (like Cooperatives/Producer Organisations/MFIs, etc.) should also be facilitated. This can also be done through guarantees and counter guarantee mechanisms and many national/ international donors are quite willing to offer this and they must be brought on board.

6.18. Credit Information and Bureau

Collateral substitutes should be created to gain historical information and reduce risk perceptions – this includes integration of low income fishery loans and transactions into MIS of Producer Organisations with CIBIL. Credit history is the only immediate collateral that a low income fisher builds through his/ her prompt repayments of loans over the loan cycles. Capturing this credit history and making it available to the client/financier is increasingly becoming important. Also, availability of credit history can help segments of population like migrant fishers (coolies) to access credit from different places they migrate to. Technology enables all these and much more and needs to be properly harnessed to this effect. (Please see M-PESA Example below). Please refer to **Annex 4** for a list of technologies that are under pilot testing and could be used to deliver financial services to low income fishers.

6.19. Establish A Fisheries Innovation Challenge Fund

Establish a Fisheries Innovation Challenge Fund (FICF), which will strive to support innovation and financial deepening through public – private partnerships and linkages, with investment by various stakeholders *It is critical to establish such a Fisheries Innovation Challenge Fund to help Producer Organisations/Microfinance industry and private sector innovate and develop models, methodologies, products, processes, procedures and performance measures for financial intermediation specially tailored to the needs of low income fishers in several contexts. It is suggested that this fund be established with contributions from, multi-lateral and bilateral donors and other stakeholders. The FAO Tsunami secretariat would be uniquely placed as coordinator, although the fund should be professionally managed.*

The Challenge Fund will catalyse the various stakeholders to innovate and find profitable ways of enhancing access for fishers – especially need based products and delivery mechanisms. The fund will focus on stimulating innovation in financial markets and deepening access to financial services, for fishers, using a fisheries sub-sector sensitive methodology for design, piloting and implementation. In generic terms, the following types of assistance could be available from this fund for delivering innovative financial services to needs of low income fishers:

- ***Outright Grants*** to support Model, Product and Process development, TA and Capacity Building, Market Research, Systems Development with regard to innovation in fisheries oriented Microfinance etc – these are not meant to be an exhaustive list but rather indicative
- ***Risk Fund Capital*** to Absorb Loan and other Losses and mitigate risk arising from some new form of financial intermediation specially for fishers – this is almost equivalent to the ***FLDG*** (First Loss Default Guarantee) in many finance projects, including for MFIs
- ***Soft Loans*** (at 1 - 3%) for enabling investments in infrastructure etc as dictated by the context/ project, with a medium to long term horizon (5 – 10 years), again with focus being innovation in respect of fisheries and especially, post harvest fisheries
- ***Quasi-Equity Investment*** in SPVs for the innovative fishing financing projects in question with provisions for return on investment as well as exit routes for the fund in terms of its equity over the years – the purposes for use could be flexible here but with the mandate of facilitating entry of women into larger and SME type enterprises in the post harvesting stage
- ***Guarantees*** could also be provided in certain cases, especially, to incentivise the existing financial sector and/or investors to invest in fisher sensitive Microfinance models, products, practices etc and the terms could be decided on a case by case basis

A detailed design exercise to establish the Fisheries Innovation Challenge Fund would have to be undertaken.

These criteria could be (adapted and) used to select Innovative Public Private Partnership's (initial screening) Projects for the Fisheries Innovation Challenge Fund

1. Helps overcome market imperfections and adds value to the produce/product/services of the low income people
2. Utilises otherwise unproductive assets
3. Tackles an important national problem like urbanization or environmental degradation in slums etc
4. Caters to building long-term sustainable livelihoods for specially disadvantaged groups of low income people
5. Tackles issues of lower output (per unit of input) through productivity and/or skills enhancing practices
6. Focuses on an issue of significant national importance
7. Has potential to generate wealth at the grass-roots for low income people
8. Has potential to impact large numbers of specialised groups of disadvantaged and low income people
9. Good potential for scaling-up and wider replication
10. Innovatively utilizes existing stakeholders/resources and enhances value consistently across supply chain
11. Projected returns to the society/country appear quite significant
12. Carbon credits can be acquired because of the project
13. Low maintenance and recurring costs
14. Fast moving produce/services with growing national and international market
15. Potential for development of regionally backward areas

The following criteria could be used to eliminate projects initially:

1. It has not been tried on a large scale and hence, large scale operations could turn out different/adversely
2. It is prone to natural disasters
3. There are many stakeholders, as a result of which coordination/cooperation could become difficult
4. Financing could still be a problem as the business model is not viable and risks are too unmanageable
5. It requires deep pockets and strong facilitation for a long period of time
6. The project requires structural changes that mandate wider (government and other) support, which may not be forthcoming
7. Competitive products could affect project outputs and impact
8. Substitute products could affect project outputs and impact
9. Inconsistency in supply and quality could be real problems
10. Transportation/Mobility could be a disadvantage

Some Critical lessons from part experience are available and Public Private Partnership Projects worked well when:

- Top management bought into projects from the outset
- The challenge fund process was aligned with or else brought about change in the corporate culture
- The fund manager and the assessment teams and panels applied the criterion of innovation on a flexible basis
- Those funded had not been previously donor funded – they were seemingly more grateful for the support, more apologetic when projects progressed slowly and more determined to demonstrate success; conversely, it was not the case that 'donor favourites' always failed
- Bidders perceived that there was a challenge and that they were competing for funds – this meant that the winners felt better and that the losers felt less bad
- There was genuine risk sharing by partners – with organisations having a sufficient financial commitment themselves to be committed to making the project a success.

Public Private Partnership Projects worked less well when:

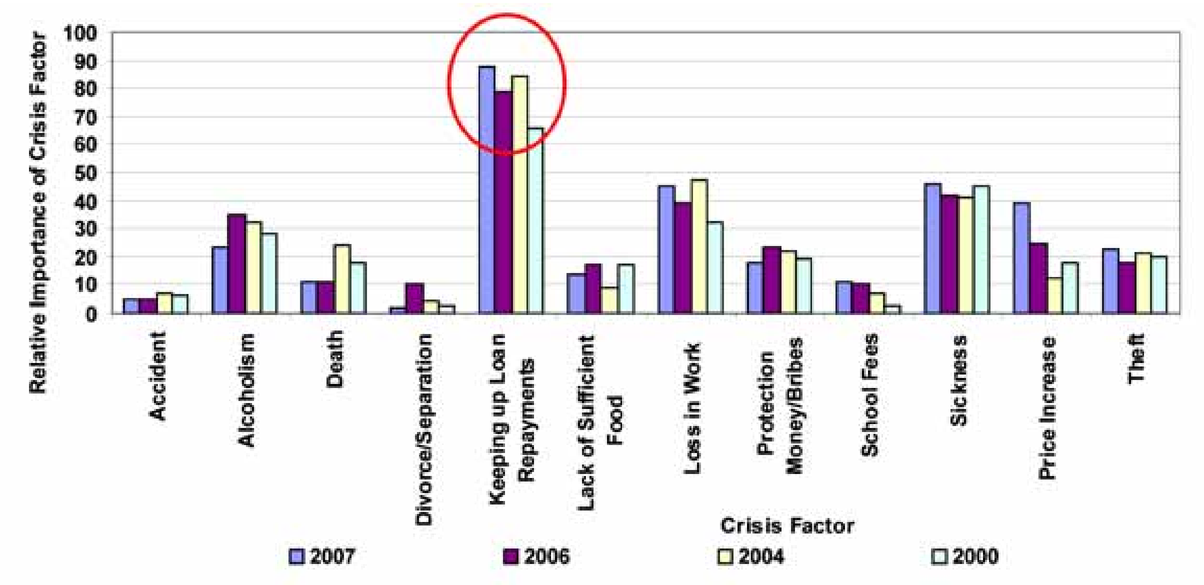
- The applications were rushed, somewhat contrived to fit, and rejection by the fund manager/panel led to some of the most negative comments heard about challenge funds from a failed bidder;
- The assessment teams and panels didn't have the experience to assess; and outcomes of these are not very clear;
- Applicants pulled together partnerships that were ineffective, perhaps because one partner was not really interested or committed, or some of the projects that were approved but never proceeded because the lead partner was not the driving force for the proposal;
- Projects required the development of new technology and the technology aspects often overwhelmed the organization's capacity to manage them or even the clear business case of their development
- The assumption was made that, merely because they were regulated institutions, they would be more reliable funding partners and would have the capacity to implement.

6.20. Support Priority Demonstration Pilots On Financing for Fisherfolk

Governments and Donors could initiate action pilots to test out new models, new methodologies and new products like micro-pensions, alternative savings products, technology based delivery systems (including SMS banking and use of e money – the huge success with poor in Africa by Vodafone), special loan products for Fisherfolk like flexible versus fixed repayment, individual lending models, cash flow based financing etc. These could be supported through the challenge fund

A) **Special Financial Products for Fisherfolk:** In many situations, PRAs conducted in India, suggest the largest source of stress (for low income Fisherfolk) appeared to be loan repayments.. Thus, there is increasing evidence that traditional loan products, especially weekly repayment concerns cause great stress on Fisherfolk. Therefore pilots that promote understanding on how to create products specifically for Fisherfolk, with loan terms and conditions convenient to needs of Fisherfolk are required. These action pilots need to be carefully structured and evaluated over time so that appropriate information is obtained with regard to the entire gamut of risks and vulnerability that Fisherfolk face in their daily struggle for survival in several contexts, their coping mechanisms and strategies and also on how these risks and vulnerability could be mitigated by delivery of appropriate Microfinance products through appropriate delivery mechanisms. This information could be collated to serve as a guide to promoting innovative fisheries oriented Microfinance in various contexts including type of products, processes, delivery mechanisms and the like.

Figure 41: Composite analysis of crisis factors (from Time series analysis)



B) Delivery of Risk Management Products Tailored to Needs of Low Income Fisherfolk: While, the design of specific and innovative micro-insurance products tailored to needs of low-income Fisherfolk, has received some attention, a more crucial aspect concerns the delivery and **distribution** of these micro-insurance and risk mitigation products. There is a need for an action research pilot that would throw light on aspects related to distribution of various kinds of micro-insurance for low income Fisherfolk

C) Reducing Transactions Cost for Retailing: The search for a low cost retail model for delivering financial services to poor Fisherfolk is another aspect that is worthy of attention. With or without use of technology, it is time that the sector provides a low cost alternative to massify retailing financial services to the poor Fisherfolk. The use of mobile phones and other such mechanisms need to be explored in a manner, in which they can be scaled up. Too often, pilots are so conducted that have succeed during a pilot test due to several factors which cannot be replicated, controlled during a large scale rollout. Investing in public-private partnerships that use a variety of stakeholders to provide efficient scaleable retail models that are efficient, effective and adaptive from the perspective of low income Fisherfolk is perhaps required.

D) Encouraging Public Private Partnerships for Diversified Livelihoods. This is a key aspect and *pilots to enhance urban and rural diversified livelihoods for Fisherfolk in several sub-sectors, are required. While some interesting experiments are on-going (please see Box below), there is a critical need to scale up and involve the private sector in larger measure through pilots. Such pilots should: (1)* Attempt to spark (sustainable) growth with regard to Micro-Enterprises and Micro-Livelihoods Systems in sub-sectors, where low income Fisherfolk can naturally diversify into; and (2) Facilitate development of strong and vibrant Micro-Enterprises and Micro-Livelihood Systems in sectors, where a large number of low income Fisherfolk are active, by investing in them and related infrastructure. *In doing this, they should ensure a fair, equitable and value-added distribution of revenue also as the supply chain for various products/services in different sub-sectors, where low income Fisherfolk have a natural advantage.*

Box 13: Scheme for welfare of fishermen launched[35]

Fisherfolk should look for new job opportunities: Minister

KOCHI: As the fish wealth in our shores is dwindling due to natural calamities, the new generation of traditional fishermen community should start looking for new job sectors, said Dominic Presentation, Minister for Fisheries and Sports.

He was speaking after the State-level inauguration of 'Theerabhadrata', a scheme to ensure livelihood for the coastal population. This is one among four components of the Tsunami Emergency Assistance Project (TEAP), which the State Government is implementing with financial assistance from the Asian Development Bank (ADB).

In the first phase, the project will be implemented in Kollam, Alappuzha and Ernakulam districts that were affected by last year's tsunami attack. Financial assistance, training and marketing facilities for fisherfolk and coastal population are being aimed through this project.

The ADB will sanction a grant of Rs.40 crores for the project. The Society for Assistance of Fisherwomen, under the Department of Fisheries, is implementing the 'Theerabhadrata' component of the project.

The Minister said the State Government had been providing assistance to improve the infrastructure required for rehabilitation works done by various agencies. Hence the complaint that the Government was not actively involved in the rehabilitation of tsunami victims was baseless, he said.

The Department of Fisheries is not providing financial assistance, but providing livelihood aids for rehabilitating tsunami victims. Steps, including putting up rainwater harvesting units, have been taken to address complaints of drinking water shortage in coastal regions.

A.P. Jayaseelan, chairman, Matsya Board, presided over the function. G. Harikumar, director, Department of Fisheries; C.K. Viswanathan, secretary, Department of Fisheries; C.R. Satyavati, executive director, Society for Assistance to Fisherwoman; K. Padmakumar, project management specialist, TEAP; spoke.

E) Enabling Livelihood Financing for Fisherfolk Through Larger Loans/Individual Lending: There is a great window of opportunity for MFIs to get into "Livelihoods Financing", in partnership with Bankers/Corporates and other(s) through Public Private Partnerships. MFIs could certainly play a important role in several sub-sectors through livelihoods financing with one or a mixture of several products, tailored to the needs of low income Fisherfolk: (1) Warehouse Receipt Financing; (2) Contract Fisheries (various types); (3) Cash Flow Based Financing; and (4) Other Innovative Products including Leasing. All of these need to be piloted in different contexts, with a view to further build and upscale financing for fisheries and they could use seasonality calendars to have a specific product suited to the context. And all of them require *the establishment, leasing and management of different types of warehouses as outlined below and such a warehousing pilot could also be initiated as part of the infrastructure development:*

Warehouses operate in a number of ways. Each type of warehouse provides the producer/customer with a different range of security and services. The five basic types of warehouses are:

[35] *Source: Adapted from "Bamako 2000 "Technical Note 5: Innovations in Microfinance"*

Table 34: Types of Warehouses and Descriptions[36]

Types of Warehouses	Descriptions
Public Warehouses	Public Warehouses are open to anyone on a non-qualifying basis. Any person who brings in agricultural goods may store them in a public warehouse.
Public Warehouses	Public Warehouses are open to anyone on a non-qualifying basis. Any person who brings in agricultural goods may store them in a public warehouse.
Field Warehouses	At field warehouses**,** an operator manages a warehouse on the premises of another business. This occurs in industries such as milling or cotton spinning where the industry finances the acquisition of raw materials, while someone else controls the stock for the bank.
Dual-Key Warehouses	Dual-key warehouses provide secure storage as both the bank and the depositor have control over the warehouse. Both parties hold keys to the storage facility, and both keys must be presented to access the facility.
Self-Managed or Single-Key Warehouses	Self-managed or single-key warehouses provide depositors with complete control over their goods at the storage facility. Typically, a bank or an MFI provides some supervision.
Trading Warehouses	At trading warehouses**,** the warehouse operator trades the stored commodity on the depositor's behalf. This may seem to be a conflict of interest for the warehouse operator, but these facilities have operated successfully in North America for many years.

These 5 types of warehouses could piloted in different contexts and various locations and the results should be used to rollout schemes through tenders for establishment of such warehouses in various states for fishers. More details on warehouse receipt financing can be found in **Annex 12** and is also discussed subsequently.

Box 14: Lessons For MFIs/POs from Warehouse Receipt Financing[37]

To ensure a successful warehouse receipt system, MFIs need to be more involved in the system than simply giving loans based on the collateral presented.

- Understand annual price cycles and monitor market prices closely to remain knowledgeable about the real value of the product being stored;
- Identify buyers early so the MFI and the producer are aware of the buyer's needs concerning quality and quantity when the season begins;
- Ensure that the producer handles the product appropriately;
- Manage risk by taking in stocks only over a specified time period and within strict price guidelines;
- Control grain quality;
- Develop detailed sales agreements that include specifics on pricing, packaging, quality, point of delivery, and contract duration;
- Ensure clear and complete internal communications; and
- Monitor government policies and actions in the sector.

[36] *Source: Adapted from Bamako 2000 "Technical note 5: Innovations in microfinance"*

[37] *Source: Adapted from Bamako 2000 "Technical note 5: Innovations in microfinance"*

7. Conclusions

After the tsunami, almost every family feels the pressure of poor catches and low earnings. Most families continue to live in poverty, in kutcha/semi pucca houses. Family size continues to be large; the average number of people per household is almost six. The one noticeable change after the tsunami is that more fishermen have switched to fiberglass boats with either inboard or outboard engines. (Engine make and capacity seem to be determined by the intermediary. SIFFS recommends outboard motors whereas in Adiramapattinam inboard motors seem to be more common.)

Fishermen who used to venture out in catamarans before the tsunami have either bought FRP boats or gone back to being coolies or crew members. However, the financial plight of both sets of fishermen is severe. Those who opted to buy fibre boats have done so by borrowing large sums of money, almost upto Rs 1.5 lacs, from local money lenders. Interest outflow on these loans ranges from 36% to 120% , even goes up to 190%. And with more boats venturing into sea from same geographical area, there is a drop in the earning per boat – resulting in even bigger financial crisis for the boat owners.

The plight of coolie labourers is even worse. They have absolutely no financial support. Even during the tsunami, almost all aid was directed at boat owners. Household earnings comprise only fishing income; there is no secondary source of income. Even in families where the women earn money, their enterprises relate to fishing or marine life. So when there is an economic downturn, the household has no option but to live on borrowings.

While almost all fishers want their children to be educated, few of the fishermen themselves have been beyond class X. Women and girls are better educated than men and boys. Given very limited opportunities for alternate employment, most boys drop out of school from class VI onwards and start venturing into sea with their fathers. Girls study upto class X and in some cases even go on to finishing their graduation.

Most families are nuclear families. However the son is expected to take care of the parents by providing financial support.

Almost 60-70% of the income is spent on food/clothing and shelter. And close to 30% is spent on medical emergencies. Hence opportunity to save is almost non-existent and in most cases the fishermen rely on borrowings.

There are defined periods of low income across geography – April & May when there is a government ban on fishing, Oct/Nov on account of monsoons. In addition to the above periods of not venturing into sea, almost all the fishermen interviewed said that 2/3 days a month they are unable to go fishing on account of ill health. In effect their earning capacity is only 7-8 months in a year. However their expenditure is throughout the year. Hence during periods of no or low income, the family invariably resorts to borrowing even for basic needs like food and shelter.

The other times when they resort to borrowings are: medical emergencies, children's education, building a house, marriage, social events, death in the family etc.

Since they have limited access to banks or other formal financial institutions most communities have built a strong social network. Friends and relatives help each other out in times of need. And this kind of financial support is in a way a saving mechanism for them. Apart from social support, most fishermen have borrowed heavily from fish traders or moneylenders at exorbitant rates of interest.

The only source of funds from banks was through loans aganst jewellery.

Here's a discussion on the basis of the remarks above.

7.1. Financial Exclusion

1. Of the 1,000 odd individuals interviewed (individual interviews and FGDs) less than 2% had an account with a bank or post office. Even fewer had an insurance policy. That reflects the fact that despite overall growth in the economy, fisheries continues to be excluded from finance.
2. Post-tsunami, the general perception is that business volumes have dropped. The latest figures on marine exports published by RBI seem to validate the general perception. Marine exports grew by 36% in 2006 to USD 738 million but grew only by 4% in 2007 over 2006 to USD 771 million. Sea faring fishermen continue to be takers of prices handed down by international/affluent markets.
3. Rural markets continue to be operated by few traders. Market operations are not streamlined or automated, hence data are not easily available. Only in those markets where intermediaries like SIFFS or MATYSAFED function are records maintained to track daily sales volumes of fishermen.
4. Daily sales volumes vary hugely. This is confirmed by analysis of available data over the last 12 to 15 years. It is difficult to predict the earning potential of fishermen.
5. It is still a cash-intensive society. All dealings are in cash only. Most fishermen leave it to their spouse to manage the household and handle the finances. It is a close-knit society with strong social and economic support among one another. Hence even savings are kept in the form of advances with each other. Society and friends support each other in times of emergencies and other financial need.
6. The fishermen has always lived for the day and never disciplined to save for future. Hence apart from creating social network/financial support, very few fishermen have either opened a bank account or had access to any financial services.
7. All these factors are responsible for most formal financial institutions staying away from fisheries.

7.2. Demand Side Issues

- Post-tsunami, there has been a rush to buy fibre boats with either inboard or outboard engines. There are mainly two reasons for this phenomenon: a) The enormous pressure on both government agencies and NGOs to help affected families. Fishers in turn expected huge financial support and borrowed large sums of money to buy these boats. b) the fear of having to brave another tsunami with small craft made fishermen opt for fibre boats with crew of 4/5 in each boat.
- The spurt in the number of boats with high-capacity engines led to over-capacity and lower catch per boat.
- Poor monsoons and post-tsunami sea-bed variations have also contributed to lower catch over the last 18 months.
- The fishermen had to spend big on children's education, marriage and medical emergencies. Invariably they relied on their social network or on money-lenders to meet their needs. The only exception was when they approached banks for "jewellery loans".
- Most fishermen had no alternative sources of earnings. In a few families women also engaged in the fish business; but most often, the male was the sole earning member. Any setback to the male's health had a huge negative impact on the family.
- Health issues continue to plague almost all families. Women and the aged were the worst affected. In most cases the women were weak and anaemic. Men's health was often impacted on account of alcohol consumption.
- Addiction to alcohol and tobacco was very high across the fishermen community. Younger fishermen said they are not liquor addicts, but alcohol consumption and violent behaviour with the spouse is fairly common.
- The general level of awareness of finance and its products is negligible. Quite a few of those interviewed said that they had opted for life insurance schemes while availing of bank loans. But they did not subsequently renew the schemes because of their ignorance.

7.3. Supply Side Issues

- Most banks/Financial Institutions continue to shy away from lending to the fisher community because of its bad credit history. Even today most banks/financial institutions label this sector as “bad credit or high risk”. Result: only development funds are spent on fishermen. No commercial funds are being earmarked for them.

- The other major roadblock is the continuing lack of understanding of the business dynamics of this industry. Fishers have financial needs like any other customer, but these needs have to be met with products tailored to business dynamics. For example, insurance schemes have to factor in the unpredictability and variability of earnings of fishers. Varying premium amounts or lump sum payments should b allowed, rather than regular structured payments over time – at least for capture fisheries.

- The other point that came across strongly in all discussions was the lack of adequate and appropriate marketing efforts by financial institutions in marketing their products. Very few fishermen had bought a financial product or service – primarily on account of lack of awareness and understanding.

- Inappropriate benefit schemes are in place – subsidies based on engine power or affiliation to certain member organisations (like MATSYAFED). These have led to unequal distribution of government grants and aggravated over-capacity.

- To summarise, a coordinated effort by all stakeholders is necessary to address problems. These stakeholders include Government, NGOs, intermediaries like SIFFS, banks, insurance companies, other financial institutions,. Last but not the least the fishing community – and this includes sea going fishers, traders, processors and exporters. Each stakeholder has a clear role to play in addressing the economic need of fishers. Other key issues are outlined below.

- Tailor-made solutions should be evolved on the basis of the business dynamics of the fishing community. Thoroughly understand the business cycle and financial needs of fishers, then offer financial services relevant and beneficial for them. This would include separate financial products for capture fisheries, vending, trading etc – all of which can address their risk and vulnerability.

- Regulators ought to redefine measurement criteria to enable MFIs/POs and banks to extend financing to fishers. This is particularly relevant given the variance between high and low earning days and hence the impact it has on repayment capabilities.

- In areas like maintenance and usage of nets, boats and engines as also financing, there is a need to study fishing techniques and technology used by developed countries and where applicable adapt and transfer feasible technologies.

- Tap womanpower in significant ways. Women in fisherfolk communities are in general more educated than the men and are responsible for managing the finances of the household. Only a marginal segment of the women population were involved in any economic activity. Almost all the women who were into income generation activities were associated with marine fishing. Hence the entire household earnings depended on marine life.

  There is an urgent need to enable them to diversify their earnings. This would reduce the variability of their earnings and also enable them to manage their financial commitments better. One of the reasons for fishers defaulting on loans is over-reliance of the household on marine life. Since this income is uncertain and highly variable on a daily basis their repayment capacity becomes suspect. Income from diverse sources will reduce over-dependence on fishing. Any finance for income diversification will be most beneficial.

- The other aspect that needs to be looked into by the stakeholders is into imparting hygiene – personal hygiene as well as hygienic fish handling that conforms to export norms.

- Lastly, personal hygiene continues to be a cause for concern. While most said that basic needs like water/fuel are now available, potable water is distributed by lorries/tankers and the quality of water is suspect. The diet of the fishers is not balanced. While fish is eaten very day, fresh vegetables and dairy products are not, almost never. The absence of a wholesome meal leads to poor health, especially of women, and the resultant high spending on medical emergencies. This again needs to be addressed.

Finance for fisheries must be sector-responsive. This means the nature of the products being offered and the institutions that deliver them will have to change fundamentally. The microfinance industry has to move beyond providing microfinance and other basic financial services (some savings), and offer a wide range of tailor-made financial services (including credit, savings, health insurance, pensions, remittances etc) that can really empower fishers and help reduce their risk and vulnerability. A new set of institutions (corporates, postal/commercial banks, insurance companies, pension funds, telecom companies etc) are keen to enter this market. They need to be spurred to design and deliver responsive financial services to fishers.

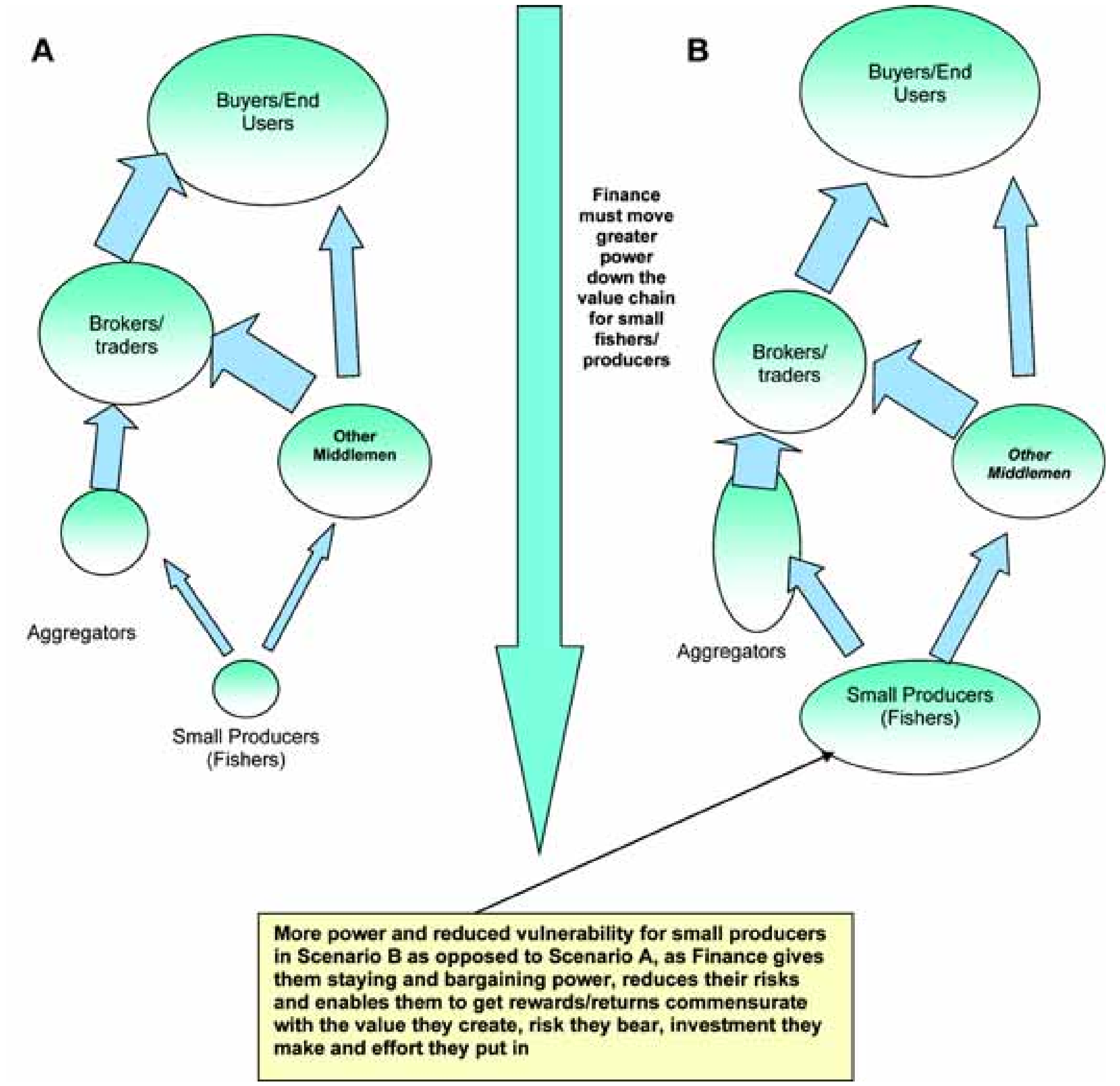
Together, the diversity of institutions, products and service providers should be very welcome. All of them have great scope to broaden and deepen the outreach of financial services to low-income fishers in a cost-effective and sector- sensitive manner. Various stakeholders – governments, bilateral donors, multilateral donors, MFIs, NGOs, civil society and the private sector – should join hands to enable the delivery of financial services that are sound and affordable and tailored to the unique needs of low income fishers.

One last and very important fact needs to be considered while looking at financial needs for small and marginal fishers. Irrespective of the specific function in the supply chain, the small/marginal producers have less coping ability, less strength and much less space to fight out the odds. Hence even when they have the potential to market they are unable to do so due to their low ability to overcome the supply side barriers such as those given below:

- Problems in accessing resources, technology and infrastructure
- Exploitative middlemen/trader and corruption
- Lack of work place and storage facilities
- Constraints to packaging/labelling and marketing
- Vulnerable to falling prices and rising input costs
- Shift in demand, and preferences
- Restrictive policy environment

Therefore, the key question is whether and how access to financial services[38] can perhaps help reverse this paradigm of inequitable development in the fisheries supply chain. For this, one needs to use financial instruments and services to *drive higher rewards, better remuneration and greater power down the fisheries value chain* as shown in Figure below

Figure 42: Tracking Power and Influence within Value Chain Analysis – Example of Small Scale Fishers



[38] *Along with other strategies and approaches. For example, it is imperative that farmers be given adequate support, especially credit. For this it is important to have a sound banking and financial system in place and also ensure that it serves the need of those engaged in small scale fisheries. Non-financial services such as access to markets, skills and raw materials apart from productivity enhancing good practices also seem essential.*

Annex 1: Catch Data in the Fisheries Sector from SIFFS and Other Models

Table 1.1: SIFFS Fisheries Catch Data Analysis from 29 days to 16 days at Sea

Sl. No	Average Catch/Day	Average Number of Days Per Month at Sea
1	1542.41	29
2	766.00	28
3	970.80	25
4	1678.13	24
5	621.04	24
6	3256.96	23
7	1006.78	23
8	430.43	23
9	2046.23	22
10	983.41	22
11	678.91	22
12	2377.76	21
13	645.00	21
14	1532.95	20
15	537.90	20
16	1589.63	19
17	897.79	19
18	634.74	19
19	1820.06	18
20	410.67	18
21	1898.76	17
22	940.00	17
23	429.71	17
24	2343.88	16
25	679.63	16

Figure 1.1: SIFFS catch data analysis from 29 days to 16 days at sea

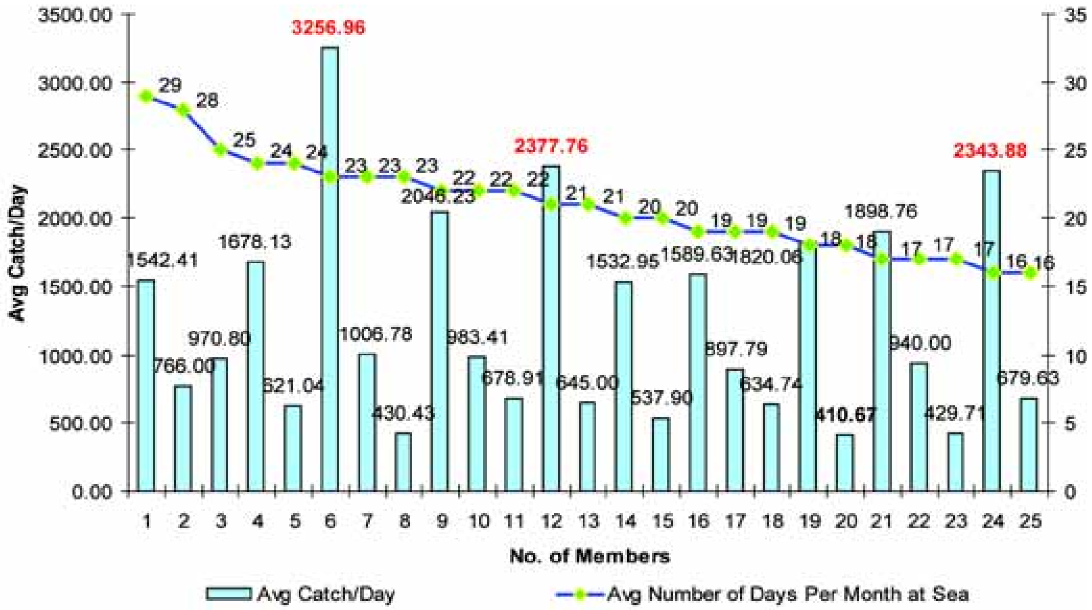


Table 1.2: SIFFS Fisheries Catch Data Analysis from 24 days to 14 days at Sea

Sl. No	Average Catch	Average Number of Days Per Month at Sea
1	1873.13	24
2	1678.13	24
3	621.04	24
4	1132.57	23
5	378.35	23
6	2046.23	22
7	346.41	22
8	2377.76	21
9	645.00	21
10	2782.95	20
11	537.90	20
12	1589.63	19
13	187.79	19
14	1820.06	18
15	610.56	18
16	2395.94	17
17	1152.59	17
18	240.47	17
19	2084.06	16
20	365.81	16
21	147.19	16
22	1362.13	15
23	196.40	15
24	1266.00	14
25	365.71	14

Figure 1.2: SIFFS Catch Data Analysis from 24 days to 14 days at Sea

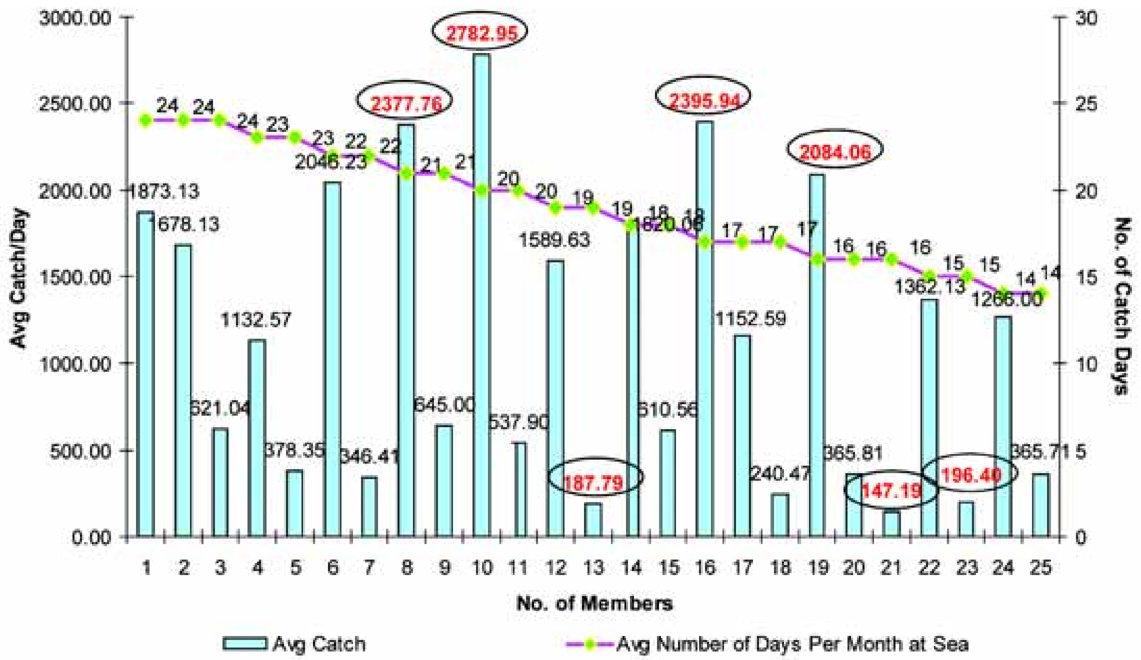


Table 1.3: SIFFS Fisheries Catch Data Analysis from 19 days to 7 days at Sea

Sl. No	Average Catch	Average Number of Days Per Month at Sea
1	1143.76	19
2	253.33	19
3	1833.36	18
4	803.03	18
5	2943.14	17
6	475.91	17
7	3215.31	16
8	2825.21	16
9	2104.09	15
10	638.79	15
11	1107.58	14
12	445.65	14
13	2563.00	13
14	202.50	13
15	2612.47	12
16	345.00	12
17	2974.84	11
18	1373.72	11
19	2861.72	10
20	1518.63	10
21	2961.33	9
22	512.00	9
23	5270.13	8
24	567.00	8
25	2281.55	7

Figure 1.3: SIFFS Catch Data Analysis from 19 days to 7 days at Sea

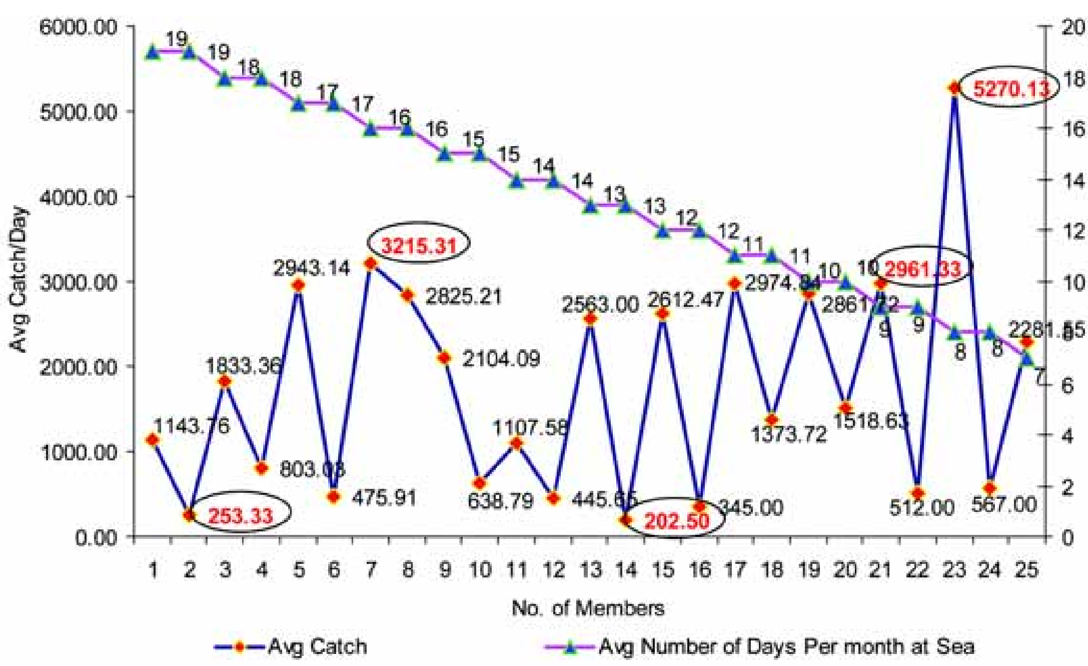


Table 1.4: SIFFS Fisheries Catch Data Analysis from 15 days to 1 days at Sea

Sl. No	Average Catch	Average Number of Days Per Month at Sea
1	1203.33	15
2	273.07	15
3	196.40	15
4	4086.21	14
5	365.71	14
6	1913.31	13
7	390.31	13
8	3192.50	12
9	549.58	12
10	4608.91	11
11	389.09	11
12	3503.00	10
13	454.30	10
14	3495.67	9
15	847.33	9
16	2993.00	8
17	251.88	8
18	2741.14	7
19	492.86	7
20	865.00	6
21	260.00	6
22	5400.60	5
23	318.80	5
24	3906.25	4
25	975.00	4
26	4603.33	3
27	283.33	3
28	2625.00	2
29	192.50	2
30	1100.00	1

Figure 1.4: SIFFS Catch Data Analysis from 15 days to 1 day at Sea

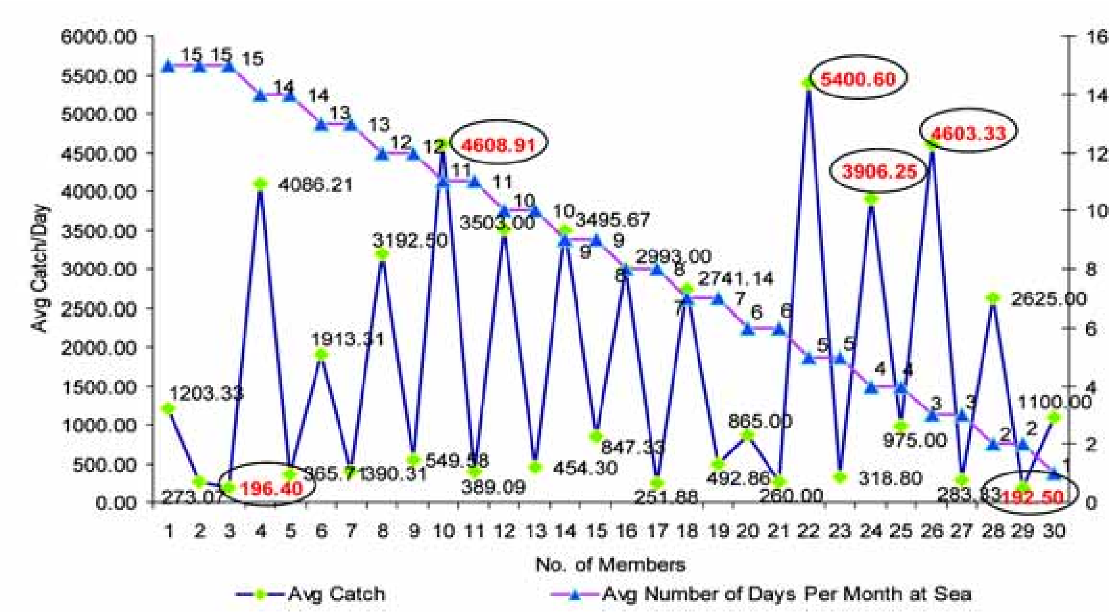
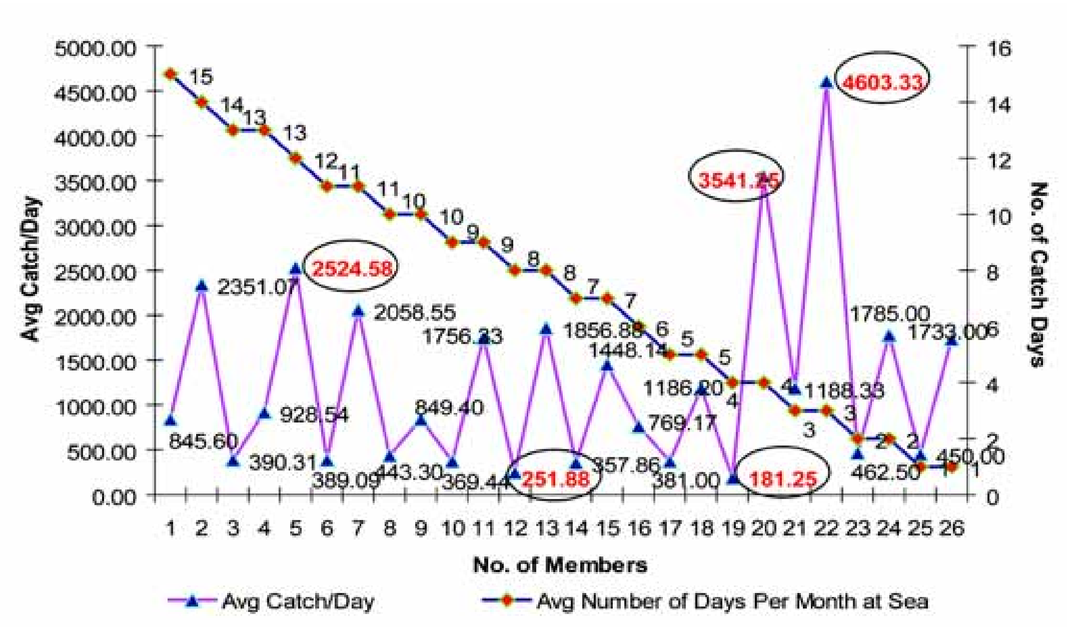


Table 1.5: SIFFS Fisheries Catch Data Analysis from 15 days to 1 days at Sea

Sl. No	Average Catch/Day	Average Number of Days Per Month at Sea
1	1143.76	19
1	845.60	15
2	2351.07	14
3	390.31	13
4	928.54	13
5	2524.58	12
6	389.09	11
7	2058.55	11
8	443.30	10
9	849.40	10
10	369.44	9
11	1756.33	9
12	251.88	8
13	1856.88	8
14	357.86	7
15	1448.14	7
16	769.17	6
17	381.00	5
18	1186.20	5
19	181.25	4
20	3541.25	4
21	1188.33	3
22	4603.33	3
23	462.50	2
24	1785.00	2
25	450.00	1
26	1733.00	1

Figure 1.5: SIFFS Catch Data Analysis from 15 days to 1 day at Sea



Annex 2: Government of Kerala Circulars on Insurance

GOVERNMENT OF KERALA

Abstract

Local Self Government Department – Health Insurance Scheme for Below Poverty Line Families –Scheme approved–Orders issued

---

Local Self Government (B) Department

G.O. (M.S:) No. 1/06/LSGD Thiruvanathapuram, dated 03-01-2006

Read: G.O. (Rt) No.2419/05/LSGD dated 21.06.2005

ORDER

Government of Kerala, as part of its one year action plan, decided to implement a health insurance scheme for Below Poverty Line (BPL) families in the state to make available quality health care to the poor. Accordingly, Government in the order referred to above constituted a committee consisting of the Principal Secretary (Finance) as Chairman and Secretary, Health & Family Welfare, Secretary, Local Self Government (Urban), Secretary, Local Self Government (Rural) as Members and the Executive Director, Kudumbashree as its Convener. The Committee had drawn up a comprehensive health insurance scheme in convergence with the Universal Health Insurance Scheme (UHIS) being implemented by Government of India, which includes benefits such as accident and health covers and had initiated discussions with the various general insurance companies for implementation of the scheme.

2. The details of the benefits of the comprehensive health insurance scheme formulated by the Committee are as follows:

A. Accident Insurance

1	Compensation for accident death	Rs 1/- Lakh
2	Full disability	Rs 1/- Lakh
3	Partial disability	Rs 50000/-

B. Health Insurance

1	Total medical expense of a family consisting of 5 members	Rs 30000/- per annum (the amount is either for one member or for all members of the family)
2	Coverage of domiciliary hospitalization	Upto Rs 6000/- per annum
3	Coverage of meternity benefits	Upto Rs 15000/- per eligible person/ per annum
4	Coverage of all existing illness	
5	Coverage of mental illness	
6	Subsistance allowance	@ Rs 50/- per day if the head of the family/ bread winner of teh family is hospitalized
7	Bystander allowance	@ Rs 50/- per day for one person

8 Cashless service / treatment for teh insured person on production of photo identity card which will be supplied by the insurer.

9 Treatment in all Government/ Private hospitals having atleast 15 beds.

3. Of the quotes received from the various insurance companies, the offer submitted by ICICI Lombard General Insurance Company Limited was found to be the lowest. ICICI Lombard has confirmed that it is agreeable to offer all the benefits envisaged in the insurance scheme formulated by the Committee. ICICI Lombard has also agreed to implement the scheme for the remaining 3 months of the current financial year as well as for

the next 3 years without any change in the rates of premium and has confirmed its willingness to enter into Service Level Agreement for the successful implementation of the scheme.

4. Government have examined the recommendations of the Committee chaired by the Principal Secretary, Finance Department and after evaluating the offer submitted by ICICI Lombard, Government hereby accepts the scheme formulated by the committee for the BPL Families which contain the following benefits.

A. Accident Insurance

1	Compensation for accident death	Rs 1/- Lakh
2	Full disability	Rs 1/- Lakh
3	Partial disability	Rs 50000/-

B. Health Insurance

1	Total medical expense of a family consisting of 5 members	Rs 30000/- per annum (the amount is either for one member or for all members of the family)
2	Coverage of domiciliary hospitalization	Upto Rs 6000/- per annum
3	Coverage of meternity benefits	Upto Rs 15000/- per eligible person/ per annum
4	Coverage of all existing illness	
5	Coverage of mental illness	
6	Subsistance allowance	@ Rs 50/- per day if the head of the family/ bread winner of the family is hospitalized
7	Bystander allowance	@ Rs 50/- per day for one person
8	Cashless service / treatment for teh insured person on production of photo identity card which will be supplied by the insurer.	
9	Treatment in all Government/ Private hospitals having atleast 15 beds.	

5. ICICI Lombard General Insurance Company who have quoted the lowest rate of premium of Rs.99/- per annum (excluding the Rs.300 subsidy receivable from the Central Government under the Universal Health Insurance Scheme) is hereby mandated to implement the proposed insurance scheme with all the envisaged benefits contained in the approved scheme and the Executive Director, Kudumbashree is hereby entrusted with the task of coordinating the implementation of the scheme.

6. It is also decided to implement the said insurance scheme throughout Kerala and to oversee the implementation; committees shall be constituted in each assembly constituency under the Chairmanship of the respective MLA. The Executive Director, Kudumbashree will submit recommendations to Government in this regard.

7. It shall be the responsibility of ICICI Lombard General Insurance Company Limited to obtain the eligible subsidy of Rs.300 per family per annum envisaged for the proposed BPL insurance scheme from the Central Government under the Universal Health Insurance Scheme (UHIS). The Government of Kerala will facilitate ICICI Lombard receiving the above subsidy by issuing the necessary recommendatory letters to the Government of India.

8. The share of the total premium of Rs.99/- which excludes the eligible subsidy from the Central Government under the UHIS shall be borne in the ratio of 1:1:1 by the State Government, Local Self Government and the beneficiary respectively. The Secretary, Local Self Government Department (Urban) is hereby authorized to effect the payment of the State Government's share of the insurance premium for one year in advance.

9. The Service Level Agreement required to be executed to ensure the smooth implementation of the insurance scheme till 31.3.2009 is hereby approved and appended as Annexure 1.

10. To ensure the smooth implementation of the scheme it is imperative that adequate steps are taken to ensure that the participating hospitals deliver proper diagnostic and treatment facilities at reasonable rates, that the hospitals do not resort to unnecessary treatments with the sole intention of availing insurance claims, that unnecessary medicines/drugs are not prescribed and that such other malpractices do not happen. Accordingly, a Committee will be constituted to suggest suitable recommendations in this regard. The Committee shall consist of the Secretary, Local Self Government Department (Urban), Secretary, Local Self Government Department (Rural), Secretary, Health and Family Welfare and the Executive Director, Kudumbashree as its members.

11. ICICI Lombard shall take adequate measures to ensure that the health cards are issued to all the beneficiaries enrolled under the scheme and that they get proper medical treatment and medications as envisaged in the insurance scheme.
12. The eligibility criteria to qualify as a BPL family is hereby approved and appended as Annexure 2 to this order.
13. Modalities for grievance redressal mechanisms constituency-wise, district-wise and state-wise will be finalized and orders issued separately in due course.

By Order of Governor

P. Kamalkutty

Secretary

Local Self Government (Urban)

The Executive Director, Kudumbashree, Thiruvanthapuram

M/S ICICI Lombard General Insurance Company Limited

The Director, Urban Affairs, Thiruvanathapuram

The Director, Panchayats, Thiruvanathapuram

The Director, Health Department, Thiruvanathapuram

The Director, Health and Education, Thiruvananthapuram

All District Collectors

All Mayors

All Municipal Chairpersons

All Presidents, Grama Panchayats

Department of Finance

General Administration (SC) Department (vide Item No.1143 of 21.12.2005)

The Secretary, Kerala Legislative Assembly (With covering letter)

All Sections, Local Self Government Department

The Director, Information and Public Relations (For giving wide publicity through audio visual media)

Copy File/Office Copy

Forwarded by Order

Section Officer

KS-B/1415/2005 ***04.01.2006***

NOTE

Sub: Kudumbashree- Health Insurance for BPL families - Translated Version of Government Order - submitting of - reg

Ref: GO (MS) No. 01/06/LSGD dated 03-01-2006

Kind attention of Government is invited to the reference cited. Government in the GO referred to above have accorded sanction to implement the Health Insurance scheme for BPL families in the State. The ICICI Lombard General Insurance Company has been mandated to implement the scheme. The Government Order sanctioning the scheme was issued in Malayalam. The translated version of the GO (MS) No. 01/06/LSGD dated 03-01-2006 is submitted herewith for favour of approval. The English version of the GO is to be appended in the Memorandum of Understanding being signed.

Executive Director

Kudumbashree

Secretary (Local Self Government - UD)

Annexure 1:

Service Level Agreement

This Service Level Agreement (hereinafter referred to as "the SLA") entered into between :

ICICI Lombard General Insurance Company Limited, having it's Registered Office at ICICI Bank Towers, Zenith House, Keshavrao Khadye Marg, Mahalaxmi, Mumbai – 400034 and an Office at 3rd Floor, Kannankeri Estate, Marine Drive, Cochin – 682 031, through its authorized signatory Shri K. Bharathan, Regional Director, (hereinafter referred to as "ICICI Lombard" which expression shall include its successors and assigns) on the first part

And

The Government of Kerala through its duly authorized signatory **Shri P.Kamalkutty, Secretary to Government, Local Self Government (Urban)** (hereinafter referred to as "the Government" on the other part

Whereas:

1. The Government proposes to implement a "Health Insurance Scheme for BPL families" (hereinafter referred to as "the scheme") for the benefit of the poor families and has vide G.O. (MS) No.1/06/ LSGD dated 03-01-2006 awarded the mandate for implementing the scheme to ICICI Lombard General Insurance Company Limited.
2. The parties hereto have for the purpose of implementing the scheme entered into a Memorandum of Understanding dated _______ enlisting the major terms and conditions (hereinafter referred to as "the MOU")
3. The ICICI Lombard General Insurance Company Limited has offered and Government have agreed to pay the premium of Rs. 99 per family consisting of 5 members and the ICICI Lombard has agreed to incept the cover upon receipt of Rs 66/- (66.66%) of the premium of Rs.99. The balance 33.33% (Rs 33/-) will be paid to ICICI Lombard within 30 days or on issuing of photo identity card to all registered beneficiary families which ever is later.
4. The Government shall issue an order on permitting that the Local Self Governments to release 33.33% (Rs33/-) of the premium of Rs 99/- in accordance with the number of families registered from each LSGIs to the ICICI Lombard on completion of the registration process and facilitate the ICICI Lombard to collect an amount of Rs 66/- from the beneficiary family and Local Self Government @ Rs 33/- each.
5. The ICICI Lombard agrees that the premium to be paid by the Government of Kerala is only Rs 99/- all-inclusive and accepts the right of the Government to apportion the premium amount between LSGIs and beneficiary families.

Now this Deed witnesseth as follows:

1. ICICI Lombard shall arrange to provide cashless medical treatment facilities to all the beneficiary families under the scheme through a tie up with a network of government and private hospitals each having a minimum of 15 beds across the state. The identification and making tie up arrangements with such hospitals should be completed at least 50% of the hospitals in each district within first three months, 25% of the remaining hospitals within first six months and the balance 25% within first nine months from the date of execution of this agreement.
2. ICICI Lombard shall ensure that each and every family that is being covered is networked to a nearest Government or private hospital that would be located within a distance of 10 - 15 km.
3. ICICI Lombard shall ensure that each and every family who approach government hospitals for treatment should get the medicines and diagnostic services prescribed by the Medical Officers free of cost from the hospital or from the specified medical stores / diagnostic center authorized by them.

4. ICICI Lombard shall arrange to provide adequate number of proposal forms along with a brochure in vernacular highlighting the benefits/features of the scheme to be distributed to the beneficiaries within a period of 14 days from the date of the Government order.
5. The Government shall facilitate to prepare list of BPL families to be insured with the following details:
   a. Name of the Head/Bread winner of the family
   b. Address
   c. Date of Birth/Age; Gender
   d. Nominee & Relationship

   Dependent's details

   Name; Gender; Date of Birth/Age; Relationship with the Head/Breadwinner of family
6. The Government shall define the BPL status of the families in clear terms and arrange to certify the BPL families being covered under the scheme. Once it has been certified by the authority designated by Govt. it shall be final and no disputes shall be entertained.
7. ICICI Lombard shall issue photo identity cards to all beneficiary families under the scheme within a period of 30 days from the date of signing MOU. The correction if any in the card issued shall be made by the ICICI, Lombard at their cost. Duplicate cards shall be issued within a period of 15 days on application from insured by the ICICI, Lombard on levying a fee of Rs 25/- only.
8. Every head/breadwinner of the family shall be issued a photo identity card comprising the following details by ICICI Lombard
   a. Name of the Head/Bread winner of the family
   b. Address
   c. Date of Birth/Age; Gender
   d. Nominee & Relationship

   Dependents

   Name

   Gender

   Date of Birth/Age

   Relationship with the Head/Breadwinner of family
9. ICICI Lombard shall (in consultation with the Government) arrange to draw up a tariff schedule for the scheme with regard to the rates chargeable for diagnosis/treatment of various ailments, cost of drugs, etc. with the participating hospitals.
10. ICICI Lombard shall ensure that the registered beneficiaries of the scheme shall get quality treatment, timely service from the listed hospitals.
11. In every hospitals identified for providing treatment to the beneficiaries special counters / cubicles should be set up and they shall get a preferential treatment from the hospital. The ICICI Lombard shall engage personals from the CBOs of poor to facilitate the beneficiary families to avail the benefits of the insurance cover.
12. The Insurance Company shall take adequate precaution to prevent any form of discrimination against the patients from the registered beneficiary family by the hospitals or diagnostic service providers or the medical shops.
13. The registered beneficiary family shall have the right to sue the hospital authority / service provider either in the Private or Public sector in the event of a criminal negligence from the hospital / service providing authority as if the beneficiary takes treatment / availing service in the normal course.

14. The registered beneficiary is entitled to get the full benefits that are agreed by the company, which is given in annexure 1 and it shall not be denied or deferred in the event of claims if exceeded the premium collected by the company from any particular locality such as Grama Panchayat, ULB, District or the State as a whole.

15. ICICI Lombard shall provide training to the representatives/coordinators nominated by the Government/recognized CBOs with regard to the cashless service to be provided to the beneficiaries.

16. ICICI shall comply with a turn around time (TAT) of a maximum of 45 minutes by the network hospitals to provide cashless treatment to the beneficiaries. In the case of emergencies and for trauma care the patients will not be kept in waiting for any reason.

17. The cost of ambulance or other means of conveyance for the transport of the patient to a networked hospital shall be included in the medical expenses of the family.

18. ICICI Lombard shall arrange for disbursal of the eligible subsistence allowance and by-stander allowance at the end of 7^{th} day in hospital or on the date of discharge which ever is earlier by demand draft / cash from the nearest bank branch.

19. The claimants shall arrange to provide the following documents for all claims under Group Personal Accident insurance:

a. FIR & Post mortem certificate in original wherever necessary for all death claims

b. Copy of the photo identity card issued by ICICI Lombard for all claims

c. Doctor's certificate in original certifying permanent disability

d. Doctor's certificate in original certifying the extent of partial disability

20. ICICI Lombard shall disburse all compensations under Group Personal Accident insurance with regard accidental death/disablement to the respective nominee/beneficiary direct without engaging any intermediary within 30 days from the date of filing the documents.

21. All claim payments shall be subject to the sum insured limits mentioned in the policy against each of the benefits available

22. If the claim preferred by the registered beneficiary/ card holder is not admitted by the hospital listed by the Insurance company or the service not given by the diagnostic service provider the registered beneficiary / card holder shall have the right to get back his actual claim (total expenditure for treatment elsewhere) plus 50% of the total cost along with penal interest at 18% per annum.

23. Grievance redressal cells will be formed in all districts with District Collector as Chairman and District Mission Coordinator, Kudumbashree as Convener. The ICICI Lombard shall also nominate an Officer / representative as Member in each district cell.

24. The Government and ICICI Lombard shall jointly constitute a Grievance Redressal Cell comprising 7 members, of which 2 members will be nominated by the ICICI Lombard and the rest nominated by the Government. The State level Grievance Redressal Cell shall have appellate jurisdiction over the decisions of the district cells.

25. The Grievance Redressal Cell would meet at least once in every month for the first six months and thereafter once in every two months.

26. In the event of ICICI, Lombard rejecting a claim by the insured they shall give the same in writing to the insured and a copy shall be sent to the District Collector of the district.

27. There shall be no arbitration in the event of any disputes and the decision of the State level Grievance Redressal Cell shall be final.

28. In the event of seeking judicial settlement, it shall be within the jurisdiction of the Courts in Trivandrum.

29. ICICI Lombard shall place advertisement hoardings highlighting the benefits available to the beneficiaries at least 2 in every Grama Panchayats, 5 in every ULBs with less than 50000 population and 10 in ULBs more than 50000 population. One hoarding should be placed in front of the accredited hospitals also. The entire cost of advertisement shall be borne by ICICI, Lombard and no claims/disputes pertaining to the advertisement hoardings shall be entertained by Govt.
30. ICICI, Lombard shall furnish detailed report on the performance of insurance scheme to Govt. through Executive Director, Kudumbashree not later than 15^{th} of every month.
31. The conditions stipulated in the service level agreement and MOU shall be final and binding to both parties and anything mentioned in the policy document contrary to this shall be superseded to this extent.
32. Any other items as may be mutually agreed upon.

Annexure 2

Health Insurance

Criteria for Identifying BPL families

- Any family who satisfies 4 or more risk index of Kudumbashree, which are given below, will be treated as BPL family and they have to pay only Rs 33/- as their share of premium.
- Any family which satisfies 3 risk factors including one from among the risk indices of 6,7,8 has to pay only Rs 33/-
- Any family which satisfies only two risk factors out of the risk indices 6,7,8 also need to pay only Rs 33/-
- All ST families who have no government employees other than an anganwadi worker / helper, last grade servants in government offices will also be treated as BPL and they need to pay only Rs 33/-
- Any family who do not satisfy any of the above stipulated conditions has to pay Rs 399/- as premium.

Risk Index of Kudumbashree

SL.No	Rural Areas	Urban areas
1.	No Land / Less than 10 cents of land	No Land / Less than 5 cents of land
2.	No House/ Living in dilapidated house	No House/ Living in dilapidated house
3.	No drinking water facilities within 300 meter	No drinking water facilities within 150 meter
4.	No Sanitary Toilet	No Sanitary Toilet
5.	No employment to any person in the family (Employment for less than 10 days a month)	No employment to any person in the family (Employment for less than 10 days a month)
6.	Women headed family / widow / abandoned women / presence of unwed mother in the family	Women headed family / widow / abandoned women/ presence of unwed mother in the family
7.	Presence of physically/Mentally challenged/chronically ill member in the family	Presence of physically / Mentally challenged / chronically ill member in the family
8.	Family belonging to SC/ST	Family belonging to SC/ST
9.	Presence of an adult illiterate member	Family having no colour Television

Annex 3: Fish market data

Table 3.1: Variety of Fish Market Data in Nochikuppam

	Average price (Rs./Kg.)		
Variety of fish common name	**Landing Centre**	**Wholesaler**	**Retailer**
Seer fish (Vanjaram)	160	240	280
Pomfrets (Vavwall)	110	180	210
Sharks (Sura)	70	140	180
Barracudas (Seela/Ooli)	50	110	130
Indian halibut (Potaal)	30	90	110
Rays (Thirukkai)	50	75	100
Cat fish (Kelluthi)	40	100	130
White fish (Kilanga)	110	170	190
Silverbellies (Vellikendai)	50	110	130
Cuttle fish (Kanawai)	100	150	190
Goat fishes (Kendal)	30	70	100
Ribbon fish (Vaalai)	45	70	100
White baits (Nethili)	55	80	100
Other sardines (Chalai)	50	80	100
Indian mackerel (Kanagnkelluthi)	60	100	130

Figure 3.2: Variety of Fish Market Data in Nochikuppam

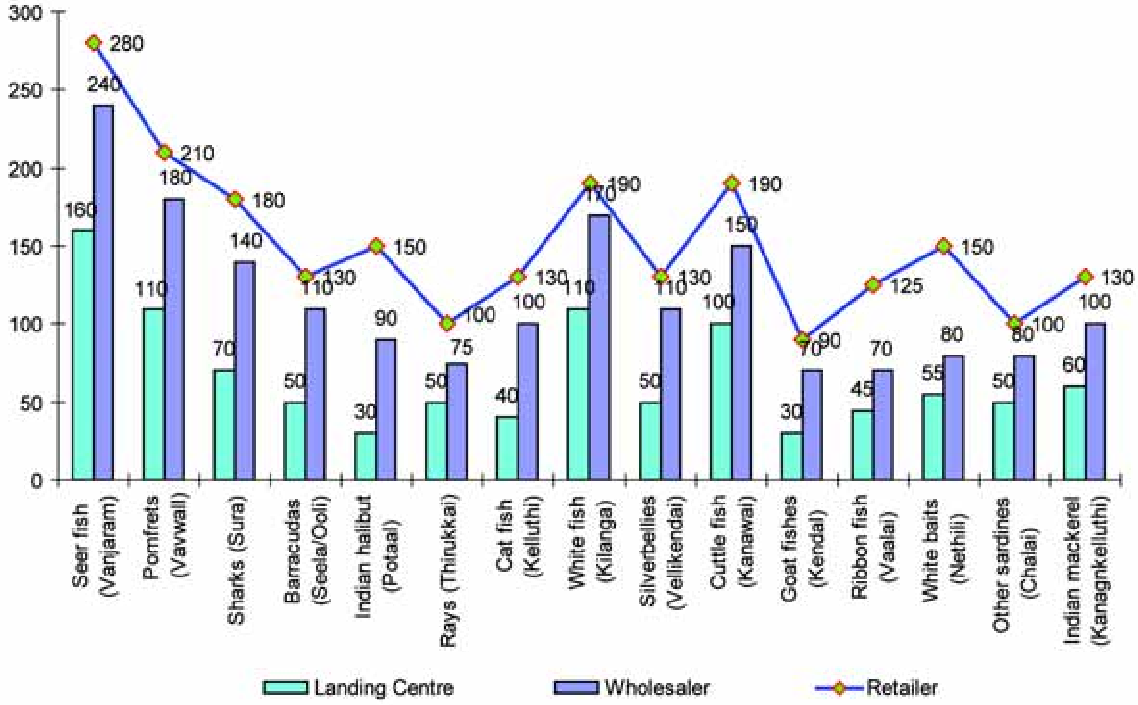
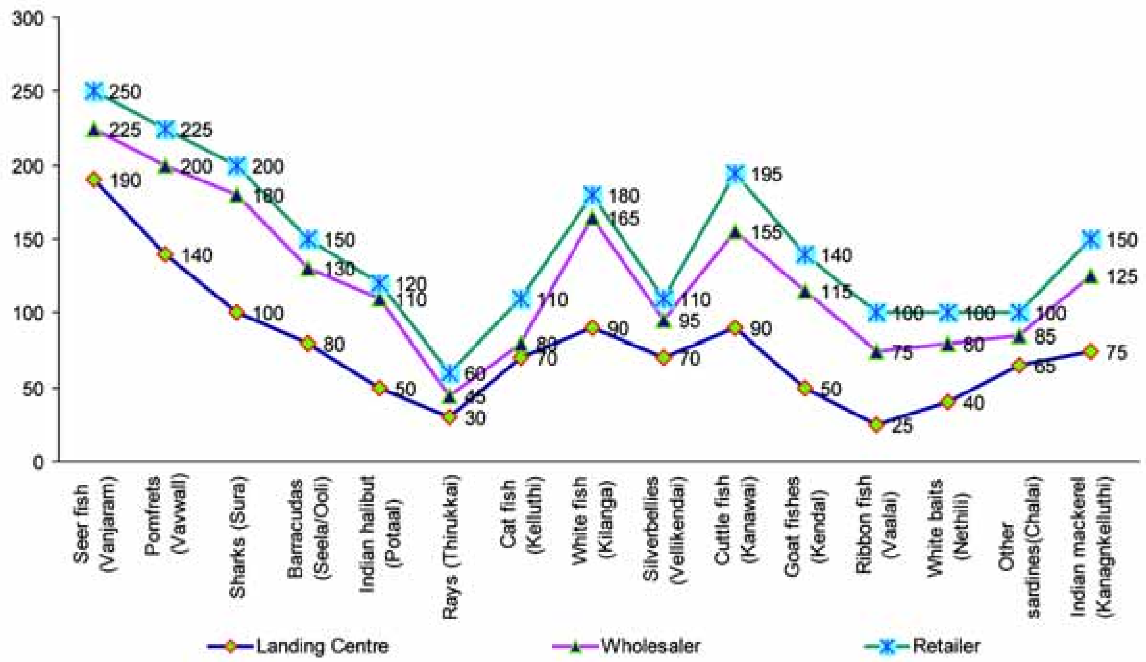


Table 3.2: Variety of Fish Market Data in Patinapakkam

	Average price (Rs./Kg.)		
Variety of fish common name	Landing Centre	Wholesaler	Retailer
Seer fish (Vanjaram)	190	225	250
Pomfrets (Vavwall)	140	200	225
Sharks (Sura)	100	180	200
Barracudas (Seela/Ooli)	80	130	150
Indian halibut (Potaal)	50	110	120
Rays (Thirukkai)	30	45	60
Cat fish (Kelluthi)	70	80	110
White fish (Kilanga)	90	165	180
Silverbellies (Vellikendai)	70	95	110
Cuttle fish (Kanawai)	90	155	195
Goat fishes (Kendal)	50	115	140
Ribbon fish (Vaalai)	25	75	100
White baits (Nethili)	40	80	100
Other sardines (Chalai)	65	85	100
Indian mackerel (Kanagnkelluthi)	75	125	150

Figure 3.2: Variety of Fish Market Data in Pattinapakkam



Annex 4: Alternative technologies from other sectors

Here are some alternative technologies under development and piloting in the Microfinance sector and many of them can be integrated into the fisheries sector:

1. **South Africa:** the Wizzit banking facility allows low-income account holders to use their mobile phones to remit money to a friend, buy airtime, or pay accounts.

2. **Philippines:** Globe Communications and SMART have introduced cell phones to store and transfer electronic cash for payments. Being introduced to Rural Bankers' Association of Philippines.

3. **Pakistan:** Union Bank – Agricultural Credit Card - This project contributes toward the rural economy of Pakistan through a credit-card based financing scheme, in collaboration with farm input companies, that enables small farmers to purchase high certified quality crop inputs at affordable prices, leading to improved crop yields and incomes ***– DFID FDCF***

4. **Tanzania:** CRDB – SMART Card - Offline debit/smart card payment system for the domestic market, that is also affordable for the majority of poor people, using ATMs, BTTs and POS located at merchant premises throughout Tanzania; and capable of linking with other local banks through a shared switch. Additional applications to include salary payments through payroll software supported by smart card core application software. Strategic alliances with MFIs will also enable/facilitate provision of financial services such as savings, fixed deposit, contract accounts, school going children's account, micro loans and transfer of funds to disadvantaged poor women living in rural areas. Services provided by MFIs with the help from the bank will in turn support and promote the development of the private sector, small and micro-enterprises and small-scale farmers. Disadvantaged groups have access to micro credits and stimulates economic activities and generates employment ***- DFID FDCF***

5. **Latin America:** Motorola recently unveiled M-Wallet, a downloadable software application that allows users to pay bills, purchase products, and/or transfer money using their cell phones. The company is targeting the remittance market between the U.S. and Latin America.

6. **Kenya and Tanzania:** The M-Pesa system supports money transfers, cash withdrawal and deposits at retail outlets, and disbursement and payment of loans. This is being commercialized in Kenya and other countries. "M-PESA is aimed at mobile customers who do not have a bank account, typically because they do not have access to a bank or because they do not have sufficient income to justify a bank account. All they need to do is register at an authorized M-PESA Agent by providing their Safaricom mobile number and their identification card. Once registered, customers can:

   - Put money into their account by depositing cash at a local Agent
   - Send money to other mobile phone users by SMS instruction, even if they are not Safaricom subscribers.
   - Withdraw cash at a local Agent
   - Buy Safaricom airtime for themselves or other subscribers

   Only Safaricom subscribers can send M-PESA, but anyone who can receive an sms can receive money by MPESA. Customers do not need to have a bank account to benefit from M-PESA services. Cash is paid into M-PESA and withdrawn at M-PESA Agent outlets. These outlets are typically local Safaricom Dealers, but can also be other kinds of retailers such as petrol stations, supermarkets and local shops. There is currently a large network of M-PESA Agents across Kenya who has been trained to use the service. It is planned to grow this network significantly in the coming months. The M-PESA service was originally created as a pilot funded, jointly by Vodafone and the UK Department for International Development [DFID] Financial Deepening Challenge Fund. The pilot ran for over 6 months in Kenya from October 2005 in partnership with Faulu Kenya, a local Microfinance Institution"[39].

---

[39] *Source: Quoted with adaptation from Vodafone (2007), official documents and other resources*

7. **Guatemala:** FINCA and VISA are piloting the use of pre-paid cards for loan disbursements by collaborating FINCA Guatemala and Nicaragua with VISA member banks.

8. **Peru:** Mibanco has become a VISA member bank, and has introduced VISA products including: Miahorro (a savings account with debit card), VISA Empresarial card which can be used at ATMs and a credit card, all launched in 2006.

9. **South Africa:** Teba Bank – A Card **-** The project provides affordable and accessible financial services to communities previously denied access, with particular emphasis on rural and peri-urban areas, by means of a Point of Sale (POS) device, which enables the customer to access a transactional banking account. POS devices will be installed at up to 20,500 retail outlets throughout four key provinces and will be owned and serviced by 22 newly established franchise companies. The primary banking products and services include standard savings and credit accounts, as well as providing the option for state social grants to be deposited directly and safely into the customer's bank accounts - DFID FDCF.

10. **Kenya:** Equity Building Society – *Mobile Banking* - The project provides commercial banking services to more than twenty rural village satellite centres through mobile banking units attached to existing branches. The project aims to prove that commercial banking services can be provided to Kenya's rural poor in a profitable and sustainable way, using appropriate information technology. The mobile units serve each area once or twice a week providing their customers in the remote areas with financial services like those in the branches such as banker's cheques, remittance processing, loan applications and many more. This service helps to reduce congestion in the banking halls, increase penetration, and profitability. The customers pay the same rates for their transactions and are charged a small fee for the mobile access. The mobile banks consist of an all terrain 4-wheel drive vehicle that is manned by two or three bank employees as well as hired government security forces that meet the customers at the designated market places on the bank days. Once there, they remove the vault, their paperwork and their laptops and serve the customers from satellite offices that have been rented out at the market places. The mobile banks use solar power to run the computerized MIS systems, the printers, and the scanners that are used to take the photos for the accounts. The mobile banks are in constant communication with the branches via GPS and VHF radio communication – DFID FDCF.

11. **Botswana:** Botswana Savings Bank (DFID FDCF) – *Electronic Passbook* **-** Botswana Savings Bank (BSB) has introduced an electronic, card-based passbook, supported by satellite based telecom technology which:
    - Provides banking services for disadvantaged and remote rural communities
    - Offers a secure service safe from fraud
    - Reduces transaction costs and improves service
    - Extends the range of banking products available in rural areas

12. **Uganda:** Uganda Microfinance Limited is piloting the use of POS devices to extend rural outreach.

13. **Colombia:** 45 co-operatives with different core banking systems are using a single POS solution.

14. **India:**
    - **Tata AIG** is conducting a pilot with CRIG Agents for insurance premium collection – under the DFID FDCF projects. The use of technology should scale up operations (under new, more flexible micro insurance regulations), enhance controls, and improve front-end processes (cash collection and receipting) - DFID FDCF
    - **Megatop/ITC** current experiment with a kiosk (choupal) network and likely future experiment with UTI Bank using mobile ATMs under the DFID FDCF project - The project delivers a range of insurance products such as endowment, term and pension policies to afford protection and provide avenues for savings. The target customers are marginal, small, medium and large farmers from 9,000 villages in Andhra Pradesh and Madhya Pradesh with a primary focus on remote villages.
    - **ICICI** and some MFIs are said to be conducting a pilot whereby loan officers use POS devices at group meetings.

- **Citi Bank** is using bio-metric ATMs for rural conservers to collect savings using Business Correspondent/ Business Finance Channel.
- **ICICI Bank** Fino Smart Card Technology pilots in India with some MFIs
- **IDRBT** Smart Card Technology Experiment in AP involving some public sector and private sector banks
- **UTI Bank** is using ATMs/other technology to deliver a range of Financial Services to low income tribal and other farmers. UTI Banks is also likely to get into using a mobile ATM network for farmers - DFID FDCF

Before introducing technology, please examine the following:

- Whether there is any value addition through the use of the said technology. This could be examined for the process or intermediary or end-user *in terms of* features, accessibility, cost and affordability, ease of use and several other aspects. This has great significance and is often the most recurring cause of failed technology initiatives for low income people worldwide. Sometimes, newer technologies compete with tried, tested, flexible and acceptable solutions (an Example as E Banking competes with cash!!!)
- Whether the technology calls for significant departure from existing practices and if so, whether this change would be feasible
- Whether a large amount of training is required for the staff or end user on how to use the technology and whether low income end-users may have some fears of it (like planning to use using a technology introducer (person) next to an ATM originally for the first two weeks but doing it still after four months in helping low income clients use the cards on the ATM – then the technology sort of becomes redundant).
- Whether there is a business case of the technology for the institution/project (Many times, the technology continues to be subsidized and/or cross-subsidized) Whether the technology is in line with regulatory aspects – in the context in question.

Annex 5: Social Security Schemes in Kerala for Fisherfolk[40]

Appendix – A

Social Security Schemes of the Department of Fisheries

Period One

Promotional Measures

1. Housing Scheme:

Under this scheme, construction of new houses and housing colonies were taken up for fishermen, especially for those who lost houses in natural calamities. Promotional social security of *housing* was changed into *housing and rehabilitation* because harbour development for mechanised boats had been on the increase and with this the need for rehabilitation of evicted fishermen became an imperative.

2. Sanitation and Health:

This scheme aimed at providing amenities like wells, latrines, approach roads etc in the fishing villages. Medical dispensaries were started in 1973/74 in selected fishing villages to provide free medical care to fisherfolk.

3. Applied Nutrition Programme:

In 1966/67 an Applied Nutrition Programme (ANP) was introduced. It was a programme for improving the nutritional status of mothers and children by providing fish powder. For the operationalisation of the programme a few mechanised boats were supplied to certain fishermen co-operatives in selected areas. Out of the fish catch, 10 percent was earmarked for the program so as to give 3-ounce fish powder per child and 5 ounce per mother.

[40] *Source: Adapted from "Bamako 2000 "Technical Note 5: Innovations in Microfinance"*

4. *Education and Training:*

a. Scholarships

Selected fishermen students from very poor families were given scholarships to pursue post-matriculate studies under this scheme.

b. Fisheries Schools

Originally, fisheries schools were those primary schools and high schools initiated by the Fisheries Department in the fishing villages. During 1965/66 the fishery schools were transferred from the Fishery Department to the Education Department to facilitate the former to start *Fisheries Technical Schools*. In 1968 three such technical schools were opened. They are to provide fishermen children a public school - type education with a fisheries bias and also training in seamanship, navigation, net-making etc. Education is given from eighth standard to the tenth with free boarding and lodging.

c. Training Centres for fishermen

A few training centres were opened to provide training for fishermen youth in the operation of modern methods of mechanised fishing.

Appendix – B

Social Security Schemes of the Kerala Fishermen Welfare Corporation

Period One

Promotional Measures

1. *Housing and Rehabilitation Scheme:*

a) The objective of the scheme was to provide planned habitats to the traditional fishermen of the state in a phased manner. The target group was fishermen who owned at least one cent of land. The first phase of construction of 10,000 houses started in 1979; the second phase for another 10,000 in 1981. The estimated expenditure per house was Rs 4,000 of which Rs 2,000 was given as grant and the other Rs 2,000 as loan. Between 1979/80 and 1982/83 KFWC gave subsidies for construction of 14,248 houses.

b) In order to rehabilitate the 2000 families to be evicted from the proposed Vizhinjam Harbour the state government had entrusted KFWC to construct houses at estimated cost of Rs 11,500 per house. The achievement during 1981/82 and 1982/83 was completion of 165 houses.

2. *Educational Scholarships:*

The objective of this scheme was to provide scholarships to students from fishing communities to pursue post-matriculate studies. The Department of Fisheries originally implemented this scheme and in 1980/81 it was handed over to KFWC. The rate of scholarship, which was existing, and the revised were as follows:

Course of Study	Rate prevailed till 29-11-1982 (Rs)	Revised rate as on 29-11-1982 (Rs)
PDC	250	500
Degree Courses	400	500
TTC	400	400
B.Ed	500	600
Diploma	400	500
PG Courses	500	750
MBBS	500	1000
Engineering	500	1000
Law	500	1000
B.Sc Agriculture	500	1000
B.V.Sc & B.F.Sc.	400	1000

3. *Marketing Assistance:*

a) Working Capital Subsidy

Objective of this scheme, started in 1980/81, was to give working capital for marketing and purchase of cycles / three wheelers etc. for marketing of fish. The target group was women fish vendors, hawkers, and cycle-load traders.

b) Women Vendors' Bus Service

In 1980/81 KFWC started to operate special bus services to transport women fish vendors with their fish baskets to the market places. Only a nominal charge is levied from the passengers every month. Year-wise average number of beneficiaries in 1980/81, 1981/82, and 1982/83 were 240, 222 and 222 respectively.

Protective Measures

1. *Equipment Insurance:*

Under this scheme, relief was provided to fishermen in the case of loss or damage of fishing crafts or/and houses. Relief given was at the following rates:

For destruction of house	–	upto Rs 100/-
For loss of canoe	–	upto Rs 500/-
For loss of catamaram	–	upto Rs 300/-

2. *Life Insurance:*

An insurance scheme was started for fishermen on 1-7-1980 to give financial assistance to the bereaved family on the death of a fisherman due to accidents while fishing or immediately after fishing and to victims of permanent or temporary incapacitation caused in fishing. The rate of assistance was as given below.

For permanent loss of both eyes or both limbs or one eye and one limb	–	upto Rs. 10,000
For permanent loss of one eye or one limb	–	upto Rs. 5,000
For permanent disability making fishing impossible	–	upto Rs. 5,000
For temporary disability	–	upto Rs. 200

Appendix – C

Social Security Schemes of the Kerala State Cooperative Federation for Fisheries Development (Matsyafed)

Period Two

Promotional Measures

1. *Housing and Rehabilitation:*

a) Subsidised Housing Scheme

This was a continuation of the KFWC scheme. In this scheme the cost estimate per house was Rs 8,000/- of which Rs 4,000 was loan from the Housing Development Bank (HUDCO); Rs 2,000, subsidy from the state government; and the balance Rs 2,000, the beneficiary's contribution. Along with completing the first and second phases of the program, initiated by KFWC, Matsyafed started to implement two more phases – (third phase) in 1986/87 and the (fourth phase) in 1994/95. In each phase, the target was construction of 10,000 houses each The cost estimate was raised from Rs 8,000 to Rs 15,000 in the fourth phase, christened as "Rajiv

One Million Housing Scheme". However, the share of government subsidy has come down from Rs 2,000 to Rs 1,500. HUDCO loan was raised to Rs 12,500 and the beneficiary's contribution was fixed as Rs 1,000. Because of the fall in subsidy and the starting of a more attractive housing scheme by the Fisheries Department, the Matsyafed housing scheme had no many takers since 1996/97. Between 1985/86 and 1997/98 the number of completed houses under this scheme reached 14,588.

b) Rehabilitation Housing Scheme

Since 1985/86 Matsyafed has taken up the housing scheme for the fishermen households evicted for Vizhinjam harbour project. The target is 1051 houses of which 867 houses were completed by 1997/98.

2. Sanitation and Health:

This was a HUDCO aided scheme for giving financial assistance to construct latrines for fishermen households. The target was 5,500 latrines.

Estimated expenditure per latrine was Rs 2,500 of which HUDCO loan was Rs 1,200; government subsidy, Rs 750 and the rest was beneficiary's contribution. Under this scheme, 4495 latrines were constructed directly by Matsyafed and an additional 1695 were constructed indirectly through NGOs and local government bodies.

3. Women Vendors' Bus Service:

Matsyafed further developed this scheme which was started by KFWC in 1980/81 in Trivandrum into other districts like Alleppey, Kollam and Eranakulam. By 1995/96 buses were running along nine routes and about 450 women availed of the service. Only a nominal charge is collected from the passengers. Matsyafed bears the rest of the expenditure.

4. Community Peeling Centres:

Matsyafed has carried over this programme from KFWC. The advantage of this scheme was that it helped many fishing women to earn a livelihood by working in a hygienic environment. In 1985 Matsyafed started two peeling centres, one each, at Neendakara and Sakthikulangara.

5. Women Vendors' Subsidy Scheme:

Matsyafed started this scheme in 1993/94 of giving a financial assistance of Rs 250/- to women fish vendors for purchasing vessels for carrying fish. In 1993/94 and 1994/95 the number of beneficiaries were 200 and 1053 respectively.

6. Education and Training:

a) Training Programme for Fishermen Youth

As part of empowering fishermen youth for alternative employment, 18 youth were given a four-month training in OBM service and repair. Employment opportunities were also given to them by starting OBM service centres. In 1995/ 96 six youth were given such training; also, 5 youth were sponsored for CIFNET marine vessel engine driver's course. Another five were sponsored for the course in 1996/97.

b) Cash Award for Students

From 1996/97 onwards fishermen students who score highest marks in secondary school leaving certificate (SSLC) examination at district level were given cash awards by Matsyafed.

Protective Measures

1. Life Insurance:

It was started in 1995 in collaboration with the National Insurance Company. This is to assist fishermen in cases of death or permanent disability due to accident. Insurance amount is Rs 0.1million for death and Rs 0.05 million for disability. The annual premium to be paid by fisherman is Rs 50/-. Membership in the scheme that was initially a mere 19,628 rose to 1,70,000 by 1997/98. In1995/96 four death cases and one disability case were given the insurance amount and in1997/98 thirty-two deaths were paid insurance.

2. Matsyafed Chairman Relief Fund:

This scheme was started in 1997/98, with a specific motive of providing emergency help to fishermen who happen to be victims of natural catastrophes. This assistance is given at the discretion of the Chairman of Matsyafed.

Appendix – D

Kerala Fishermen's Welfare Fund

The Rate of Contribution by the Different Stakeholders in the Sector

a) State government: provides per year Rs 30 million for the pension scheme and Rs 1.7 million towards insurance premium.

b) Fishermen: to remit Rs 30 per year (later revised to Rs 50)

c) Dealers: to remit 1 % of the sales turn over

d) Exporters: to remit 1 % of the sales turn over. Prawn/fish farmers: to remit 2 % of the sales turn over

e) Boat owners:

< 15 GRT: Rs 100 per month for 9 months

15-25 GRT: Rs 200 per month for 9 months

25-35 GRT: Rs 400 per month for 9 months

35 GRT: Rs 1000 per month for 9 months

f) Catamaram owners:

Non-motorised: Re 1/- per month for 9 months

Motorised: Rs 2/- per month for 9 months

g) Other craft owners:

< 9mts, non-motorised: Rs 3/- per month for 9 months

< 9mts, motorised: Rs 5/- per month for 9 months

9mts, non-motorised: Rs 5/- per month for 9 months

9mts, motorised: Rs 7/- per month for 9 months

h) Chinese and stake net owners: Re 1/- per month for 9 months.

Appendix – E

Social Security Schemes of the Kerala Fishermen Welfare Fund Board (Matsyaboard)

Period Two

Promotional Measures

1. Education and Training:

As an incentive for students of fishermen community to excel in studies, the Matsyaboard has instituted cash awards and scholarships. Accordingly, those who get the highest and the second highest marks for the secondary school leaving certificate (SSLC) examination from the three geographical regions (south, north, and central) of Kerala are presented with cash award of Rs 2000/- and Rs 1000/- respectively. These were raised to Rs 3000/- and Rs 2000/- respectively since 1994. In addition, an award of Rs 1000/ - each is given to those who secure highest marks in each revenue districts. A scholarship programme was started in 1994. As per this scheme, fishermen children who stand first and second in the SSLC are provided scholarships of Rs 100 per month for two years to pursue higher studies.

2. Family Planning Scheme:

This is a scheme that gives financial assistance for the post operational care to the fishermen or their wives who undergo sterilisation operation. The assistance given was Rs 250/- and the amount was raised to Rs 500/- from 1994.

3. Basic Sanitation Scheme:

As part of improving the health and sanitation of fishermen households, the Matsyaboard started giving financial assistance of Rs 2,500/- for construction of latrines. Beneficiaries should be registered fishermen who own a house and the land around. During 1996/97 nine hundred latrines were constructed in the state and 720 were to be completed by 1997/98.

Protective Measures

1. Group Insurance Scheme:

There was a scheme originally run by the Fisheries Department for providing to fishermen financial assistance at death or disability due to accident. However, it was in 1986 that the Matsyaboard brought this scheme under a group insurance scheme. The scheme covers all fishermen of the age group of 15 to 70, registered under the Kerala Fishermen Welfare Act, 1985. The central and state governments in a fifty-fifty ratio finance this scheme. Compensation (in Rupees) given under this scheme was enhanced four times as seen below.

Case\Revision date	10-9-1986	10-9-1990	10-9-1992	10-9-1996
Death	15,000	21,000	25,000	50,000
Found missing	15,000	21,000	25,000	50,000
Permanent or total disablement	15,000	21,000	25,000	50,000
Temporary or partial disablement	7,5-00	10,500	12,500	25,000

2. Compensation for Death of Fisherman (during or immediately after fishing, not due to accident):

This scheme gives financial assistance of Rs 15,000 to dependants of fishermen who happen to die during fishing or immediately after fishing due to some causes other than accident. Thus, it covers the cases of death, which are not covered under the group insurance scheme. Beneficiaries of this scheme can be any registered fishermen.

3. Financial Assistance for Marriage of Fishermen's Daughters:

Poor fishermen who struggle to meet the expenses related to the marriage of daughters are assisted by this project. It started as a loan cum grant scheme in which Rs 1200 was given as loan and Rs 200 as grant. Later, in 1995, it was made a full grant scheme of providing Rs 1,500 per marriage.

4. Financial Assistance at Death of Dependants of Fishermen:

Under this scheme a fisherman is entitled to get a financial assistance of Rs 250/- (revised as Rs 300/- in1991) to meet the expenses related to the death of his dependants such as father, mother, wife, minor sons or unmarried daughters.

5. Old Age Pension:

This is one of the most popular schemes of the Matsyaboard and the one that accounts for the largest financial outlay. Under this scheme, a fisherman who has completed 60 years can apply for old age monthly pension under the following conditions:

- He had undertaken fishing activity for livelihood for a period not less than 10 years prior to the date of application.
- He lived in a fishing village in Kerala at least for a year.
- His personal annual income does not exceed Rs 1500

The pension amount was originally Rs 75/-. It has undergone subsequent revisions to Rs 85/- in 1992 and to Rs 100/- in 1997.

6. *Financial Assistance for Temporary Disability of Fisherman due to Accident:*

If a fisherman cannot go for fishing at least for a period of seven days on account of some temporary disability due to accident, he can avail of the benefit of this scheme. The assistance per this scheme is as follows: Rs 100/- for the first seven days and Rs 15/- per day for the following days within a ceiling of total assistance at Rs 300/- (which is raised to Rs 500/- w e f 1-1-1991).

7. *Financial Assistance to the Dependants at Death of Fishermen:*

If the dependants of a deceased fisherman are not entitled to benefits of group insurance or any other benefits of the Matsyaboard to meet the funeral expenses, they can get assistance under this scheme. The amount given was originally Rs 250/-. Later it was raised to Rs 500/-in1991 and to Rs 1000/- in 1994. In 1996 the scheme was thoroughly revised and thereafter, the dependants could avail Rs 5,000/- at the death of an active fisherman below 60 years, whatever be the cause of death.

8. *Financial Assistance for Fatal Diseases:*

This scheme intends to help fishermen within the age group of 23-60 and whose family income per year is below Rs 15,000/- to meet medical expenses in treatment of certain fatal diseases. The diseases covered under the scheme and the respective assistance are as follows:

Diseases	Financial AssistanMce (Rs)	
	As in 1991	As in 1996
Heart surgery	25,000	40,000
Kidney transplant	25,000	40,000
Brain tumour	25,000	40,000
Cancer	25,000	40,000*
Paralysis	12,000	12,000
Mental disease	5,000*	5,000*
Severe elephantiasis	pension of Rs. 100/-pm	pension of Rs.100/- pm

** = In case the disease is not cured, one can claim a monthly pension of Rs 100/*

9. *Matsyaboard Chairman Relief Fund:*

It is a scheme envisaged to assist fishermen in contingencies. This scheme entitles the Matsyaboard to take up immediate relief measures in unexpected natural calamities. As per this scheme the following emergency assistance can be claimed:

- Cases of getting wounded in accidents while fishing: (range of assistance: Rs 100 - 500)
- At the death of fisherman and the family having no means of livelihood: (Rs 250 - 1000)
- Cases of getting wounded in rescue operation: (Rs 100 - 300)
- Fishermen households loosing house and belongings in flood or fire: (Rs 500 - 2500)
- Though not house, belongings getting lost in fire or flood: (Rs 300 - 1500)
- Cases of snake bite, burns etc.: (Rs 200 - 500)
- Cases of fishermen being found missing while fishing: (Rs 1000 - 2000)

10. *Eye Ailments Scheme (Nethrajyothi):*

This scheme, as the name, 'Nethrajyothi' indicates, is one to give light to the blind. It envisages organising medical camps in coastal villages for detecting and treating eye-ailments. Fishermen who suffer from diseases like cataract are given treatment, spectacles etc.

11. Special Assistance by Matsyaboard:

Under the provisions of this scheme the Matsyaboard can render financial assistance in certain occasions as special cases. Such occasions may arise when an applicant has not met all the legal requirements for an assistance but at the same time the Matsyaboard is convinced of his/her case being genuine.

12. Maternity Assistance:

It was only in 1996/97 this scheme was started. This scheme provides maternity assistance of Rs 500/- to fisher women and to fishermen's wives for the first two childbirths.

Appendix – F

Social Security Schemes by the Department of Fisheries

Period Two

Promotional Measures

1. Savings cum Relief Scheme:

This is one of the most popular schemes of the Department. The Central and State governments assist this scheme on a fifty-fifty basis. The objective of this scheme is to give financial assistance to all registered fishermen of the age group of 18 - 60 during the four lean season months of March to June. It can, therefore, be called an unemployment benefit scheme. Financing of the scheme is as follows: Each fisherman has to remit Rs 45/- each during the eight months of fishing. To this total contribution of Rs 360/- the Centre and State governments contribute Rs 360/- each and the grand total of Rs 1080/- is distributed to each fisherman in four monthly instalments of Rs 270/- each during the lean season.

2. Housing Scheme:

Two housing schemes continue to be operated under the Department. The first one is a fully Central Government sponsored scheme within the Tenth Finance Commission's *Problem Grant*. Under problem grant the state government is provided with Rs 700 million for undertaking housing, drinking water projects, and fisheries roads during 1996-2000. Of this, Rs 500 million is earmarked for housing; Rs 70 million for drinking water; and 130 million for road development. The other scheme is 60 percent centrally sponsored and the rest 40 percent state sponsored. A major attraction of the Department housing scheme is that it is a full grant scheme of Rs 35,000/- per house.

3. Coastal Electrification (Theerajyothi):

Under this scheme an aid of Rs 1000/- each is given to selected fishermen households towards electrifying their houses.

4. Sanitation Scheme:

Through this scheme the Department provides financial assistance of Rs 2,500/- each to selected fishermen households to construct latrines.

5. Safe Drinking Water Scheme:

The Department has started drinking water schemes in 70 selected villages.

Annex 6: Case Study: Cycle Fish Vendors In Cuddalore District[41]

Case Study: Cycle Fish Vendors In Cuddalore District

Cycle fish vendors are indispensable actors in Cuddalore district. Yet they were not included in the rehabilitation programs of the government and NGOs, after the t unami of December 2004.

Cycle fish vendors live from buying the fresh fish on the seashore directly from the fishermen and travel then to the main fish markets or to villages to sell the fish. This activity makes them important members in the main livelihood on Tamil Nadu's coast area.

The difficulties of the cycle fish vendors came through after the tsunami, and made them organize themselves into federations. These federations are divided into four blocks which represent four zones in Cuddalore district: Komaratchi block, Parangipettai block, Mel-Bhuvanagiri block and Keerapalayam block. A federation has 50 to 60 members, each of whom saves five rupees a day to deposit into a common savings account that enables investment in new equipment.

Cycle fish vendors have also borrowed money from money lenders. It helped them survive but also trapped them in a spiral of debt. .

Many fisher communities received sizable assistance from the Tamil Nadu's government after the tsunami. But cycle fish vendors did not because they were not direct tsunami victims. What's more, cycle fish vendors are scattered among many coastal villages, and are not numerically strong enough to exert pressure for claiming rights. However, th stoppage of fishing activity hit the vendors as they had nothing to sell. Further, the flooding of coastal areas inundated the cycle fish vendors' equipment and living space too.

There seems to be a big gulf in development between cycle fish vendors and other groups. The cycle vendors may get some help if they belong to women federations or to self-help groups – which attract attention from NGOs, funding agencies and government rehabilitation schemes. Cycle fish vendors feel neglected. Their voices are not heard, but they watch neighbours getting substantial assistance and building new houses.

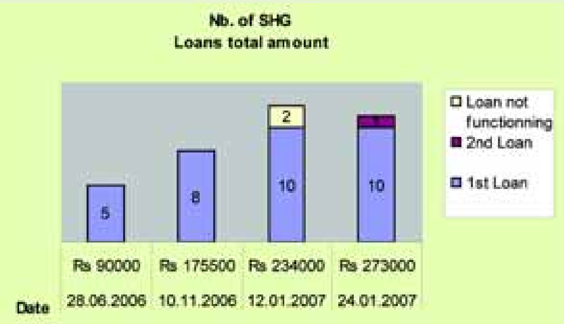
[41] *Source: Quoted with adaptation from Bless Office (2007), official documents*

The role of BLESS in CFV federations

BLESS started to help cycle fish vendors, when it found that nothing was being done for those who were indirectly affected by the tsunami. The main mission of BLESS is to create a micro-credit system to support sustainable development projects for Cycle Fish Vendors –in the first instance, by relieving them from highly exploitative money lenders.

To ensure economically efficient activities for cycle fish vendors, BLESS has set up Self Help Groups for them. It has organized four block federations, and 12 mixed SHGs of men and women, with 10 to 20 members in each group. The groups meet once a week and collect 25 rupees each to put in a savings account. These savings are available for each member of the group to use as internal loans (the interest rate is decided by the group and turn around 1 to 3%). If a member wants an internal loan, his request is discussed by the members. The decision to allow a loan is made by the elected animator and the 2 representatives.

BLESS has developed a micro-credit system with the groups, using an initial fund of 3000 Euros (175665 rupees) provided by the Italian funding agency WHY. This enables a revolving loan specifically for cycle fish vendors. Loans are given for six months at a rate of 1, 5 %. Loans are to be repaid every month. Each group member is responsible for repaying his share of the total loan.



To cite an example. One of the SHGs with 20 members took a loan of Rs 18.000. This amount is shared among the members; each has to manage repayment of Rs 900. Every 4 weeks, each member of the group gives Rs 163.5 (as repayment of the principal and the interest of the loan). The amount has to be handled to the animator of the group and to the BLESS coordinator in charge of the SHG. A part of this amount is taken by BLESS as documentation fees (administration work, papers etc.). The first loans given are mainly used to repay debts to money lenders and to buy fish.

As BLESS is a non-profit NGO, repayments of the principal loan serve as revolving loans for new loans taken by other Self Help Groups. The graph shows the number of SHGs which have taken a loan. The total amount of loans given by BLESS is shown below. From the 12 Self Help Groups created since 2006, five groups took a Rs18.000 loan. One loan has already been repaid, the group has now taken a second loan. Three new groups received around Rs30.000 in November 2006, two others in January 2007.

Because of coordinating problems, 2 groups are not functioning. People are too scattered and find difficulties to maintain the group and cannot meet regularly. BLESS is actually working with these people to reorganize the management. The Rs175665 of the fund have been used for the first 8 groups, the repayments collected from the loans are given as a loan for the 2 new groups created in January 2007 and for the second loan of the first group.

Improvements on Cycle fish vendors’ standard of life

The first relief felt by the cycle fish vendors was the end of the pressure from the money lenders. With the micro-credit system, they could repay all their debts and already made a big step towards new initiatives. By having a structure to organize themselves and having to bring savings every week, they also developed a life through solidarity. A strong relationship is created between the members who support each other in every day life and get involved together in traditional or religious events. BLESS has given efficient trainings on leadership, accounting and management to support people for a good maintaining of their group.

Most of the men are out of alcoholism and can support better their family. They achieved to get enough money for their basic needs and encourage their children to go further in studies. The children go to government schools exempt of charges where they can receive school equipments and food for free. Some families receive government help for food such as 2 rupees per kilo of rice.

Actual situation

At the moment people are facing a new problem to protect their livelihood activity. The government put a 45 days restriction on fishing activity to protect the fish population during the breeding season. Only small fishing boats are allowed to maintain their activity; but the fish consumption is highly decreased and such is the fish vendors' activity.

To continue to support their family, most of the fish vendors are doing other works or participate to the "Food for work" scheme installed by the government for landless people. The government guarantees 100 days of work per year, paid 60 rupees a day only, in different works like digging ponds or road maintenance. These jobs are mainly taken on by women, and men are asking for an unemployment status and want compensation from the government during the fishing restriction period. They are preparing a petition to send to the fishery department director of Tamil Nadu and are waiting for an answer on the 5^{th} of May. They understand the necessity of putting a restriction on fishing and support the idea but they need alternatives for their livelihood activities.

Their work usually brings a profit of 75 to 100 rupees a day and 15O rupees in exceptional days during high activity season. They need about 3000 rupees a months to support the family. In most of the families, women are helped by the parents or by the school to take care of the children during the day, so they can work for another source of income to guarantee money for savings.

Conclusion

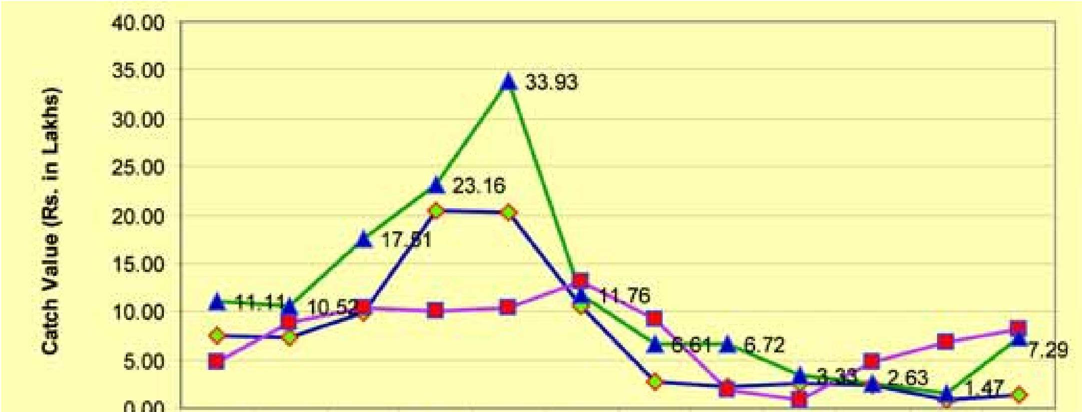
The main goal of relieving the fish vendors from their debts has been achieved, but still the vendors are struggling to get further on just having the minimum to live. They still need new equipments like bicycles, boxes, weighing scales…they would like to achieve a better standard of living, as well as being able to pay an insurance on their property and their equipment. As a long term solution for an income generating activity, some fish vendors are planning on taking for rent a pond conducted by the *Panchayat* (county level government organization) in order to grow fishes and sell them in the nearby villages. The pond would cost them from 10.000 to 50.000 rupees a year depending on the size.

Cycle fish vendors are just getting out of the first step towards economically developing initiatives, but they still show a huge need of being supported at least to stay stable in their new situation thus showing hope for successful work for their future.

Annex 7: FMC Pallithottam - Grading of members as on 31 March 2007

Sl. No	Name	Total (36 Months)		Monthly Average		Annual		Grading
		Bills	Catch	Bills	Catch	Bills	Catch	
1	Thomas P	373	822586	10	22850	124	274195	D
2	Anthony A	230	379380	6	10538	77	126460	xx
3	Joseph Albert	603	1939535	17	53876	201	646512	A+
4	Xavier J	194	607900	8	25329	97	303950	C
5	Solomon A	241	407630	7	11323	80	135877	xx
6	Celestine M	523	1771040	15	49196	174	590347	A+
7	Michael B	466	1104615	13	30684	155	368205	B
8	T.Joy	347	1156725	10	32131	116	385575	B
9	Stephen Pius	473	1337740	13	37159	158	445913	A
10	Francis O	330	784590	9	21794	110	261530	D
11	Jerome T	355	717110	10	19920	118	239037	E
12	Joseph Vincent	312	758230	9	21062	104	252743	D
13	Kunjumon G	178	316360	5	8788	59	105453	xx
14	Kunjappan L	287	958940	8	26637	96	319647	C
15	Stephen Julian	505	1809455	14	50263	168	603152	A+
16	Gilbert T	245	454335	11	19754	128	237044	E
17	Stephen Johnson	230	269235	6	7479	77	89745	xxx
18	Cletus Albert	407	830780	11	23077	136	276927	D
19	Cletus Alphonse	357	1029770	10	28605	119	343257	C
20	Cletus Raimond	294	701905	8	19497	98	233968	E
21	Baiju G.	294	345680	8	9602	98	115227	xx
22	M. Ambrose	566	1859480	16	51652	189	619827	A+
23	Kamance P	275	492450	8	13679	92	164150	x
24	Xavier A	155	451630	4	12545	52	150543	x
25	Alphonse J	438	1200090	12	33336	146	400030	A
26	Francis E	397	1066575	11	29627	132	355525	B
27	Raimonds A	359	880030	10	24445	120	293343	D
28	Johny G	361	791340	10	21982	120	263780	D
29	Pancras V	438	1039625	12	28878	146	346542	C
30	Peter J	352	936880	10	26024	117	312293	C
31	Nelson S	345	539560	10	14988	115	179853	x
32	Manoj R	276	663250	8	18424	92	221083	E
33	Cletus Joseph	356	502650	10	13963	119	167550	x
34	Stephen S (Union)	456	1200800	13	33356	152	400267	A
35	Alexander M	95	256465	7	18319	81	219827	E
36	Terrence J	140	349310	7	16634	80	199606	x
37	Valerian Albert	283	597880	15	31467	179	377608	B
Total		**12536**	**31331556**	**369**	**918883**	**4425**	**11026591**	
Average Per Member		**338.81**	**846798.8**	**10**	**24835**	**120**	**298016**	
Mode		**566**	**1939535**	**566**	**1939535**	**17**	**53876**	

Figure 7.1: Catch luctuations: Financial years - 2004-2007



	April	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
2004-2005	7.52	7.36	9.93	20.34	20.21	10.49	2.75	2.27	2.52	2.44	0.89	1.39
2005-2006	4.75	8.82	10.43	10.03	10.38	13.17	9.24	1.83	0.86	4.76	6.81	8.10
2006-2007	11.11	10.52	17.51	23.16	33.93	11.76	6.61	6.72	3.33	2.63	1.47	7.29

Annex 8: Pallithottam Financial Statements (Sample)

Table 8.1: Financial Statement of Thomas. P (Pallithottam)

Typical Pallithottam Unit (Financials)			OWNER CUM WORKER (Pallithottam) Financials			
Average Catch per year (reported)	274195		**Annual Earning**			**93872**
Actual (assuming 20% is not recorded)	54839	**329034**	**Engine**	70000		
Common Expenses (6%) of Actual	-19742		Life of Engine (years)	4		
Oil @ 7000/month	-84000	**-103742.04**	Salvage Value	15000		
Shareable Income		**225291.96**	Depreciation		13750	
Share Owner (30%)	67587.6		Interest Expenses		3267	**-17017**
Share Crew (70%)	157704		**Boat**	80000		
Crew Earning/Year (1/6 of 70%)		**26284.062**	Life of Boat (Years)	7		
Crew Earning/Month		2190	Salvage Value	20000		
Owner-Worker Earning/ year (30%+ 1 share)		**93872**	Depreciation		8571	
Owner cum Worker Earning/Month		7823	Interest Expenses		5600	**-14171**
			Nets (at least 6 types)	125000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		25000	
			Interest Expenses		5833	**-30833**
			Additonal Expenses			
			Repairs for engines/Boat		7000	
			Annual Bonus for Crew		2000	
			Interest on Crew Advances (Rs.25000 *24%)		6000	**-15000**
All expenses on one Unit/Year	-19742		**Total Owner Expenses**			**-77021**
	-84000		**Net Annual Earning**			**16850**
	-77021	**-180763.47**	Net Monthly Earning			**1404**
Average Expense/Day across 200 days		**-904**	Income Difference (Owner/Crew) Monthly			-786
			Income Difference (Owner/Crew) Yearly			-9434

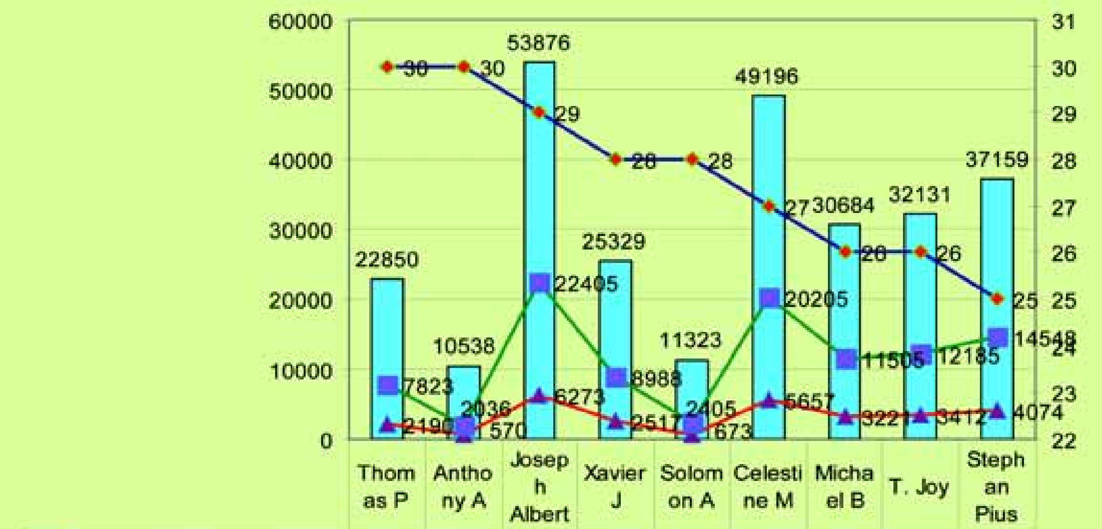
Table 8.2: Financial Statement of Anthony. A (Pallithottam)

Typical Pallithottam Unit (Financials)			OWNER CUM WORKER (Pallithottam) Financials			
Average Catch per year (reported)	126460		**Annual Earning**			**24436**
Actual (assuming 20% is not recorded)	25292	**151752**	**Engine**	70000		
Common Expenses (6%) of Actual	-9105.1		Life of Engine (years)	4		
Oil @ 7000/month	-84000	**-93105.12**	Salvage Value	15000		
Shareable Income		**58646.88**	Depreciation		13750	
Share Owner (30%)	17594.1		Interest Expenses		3267	**-17017**
Share Crew (70%)	41053		**Boat**	80000		
Crew Earning/Year (1/6 of 70%)		**6842.136**	Life of Boat (Years)	7		
Crew Earning/Month		570	Salvage Value	20000		
Owner-Worker Earning/ year (30%+ 1 share)		**24436**	Depreciation		8571	
Owner cum Worker Earning/Month		2036	Interest Expenses		5600	**-14171**
			Nets (at least 6 types)	125000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		25000	
			Interest Expenses		5833	**-30833**
			Additional Expenses			
			Repairs for engines/Boat		7000	
			Annual Bonus for Crew		2000	
			Interest on Crew Advances (Rs.25000 *24%)		6000	**-15000**
All expenses on one Unit/Year	-9105.1		**Total Owner Expenses**			**-77021**
	-84000		**Net Annual Earning**			**-52585**
	-77021	**-170126.55**	Net Monthly Earning			**-4382**
Average Expense/Day across 200 days		**-851**	Income Difference (Owner/Crew) Monthly			-4952
			Income Difference (Owner/Crew) Yearly			-59427

Table 8.3: Financial Statement of Joseph Albert (Pallithottam)

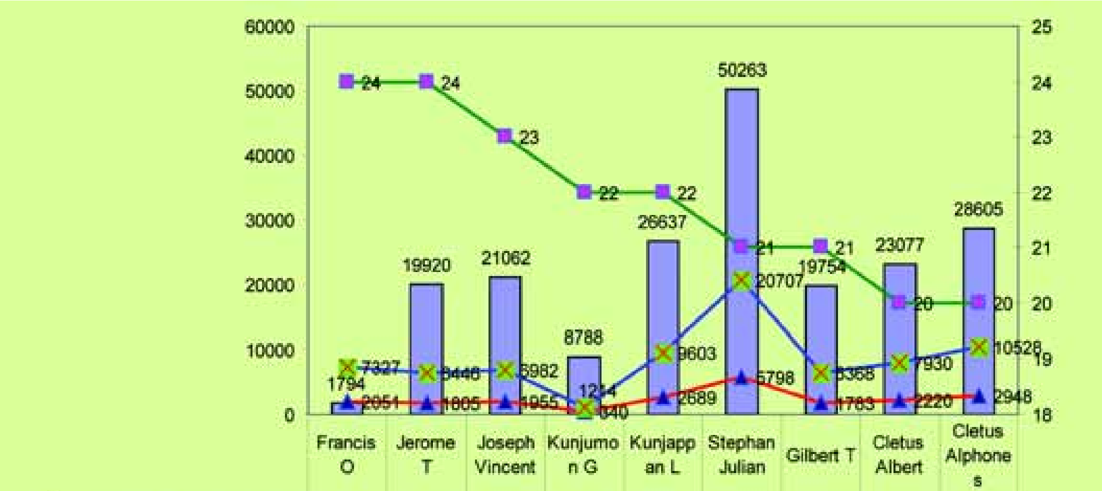
Typical Pallithottam Unit (Financials)			OWNER CUM WORKER (Pallithottam) Financials			
Average Catch per year (reported)	646512		**Annual Earning**			**24436**
Actual (assuming 20% is not recorded)	129302	**775814.4**	**Engine**	70000		
Common Expenses (6%) of Actual	-46549		Life of Engine (years)	4		
Oil @ 7000/month	-84000	**-130548.86**	Salvage Value	15000		
Shareable Income		**645265.88**	Depreciation		13750	
Share Owner (30%)	193580		Interest Expenses		3267	**-17017**
Share Crew (70%)	451686		**Boat**	80000		
Crew Earning/Year (1/6 of 70%)		**75280.979**	Life of Boat (Years)	7		
Crew Earning/Month		6273	Salvage Value	20000		
Owner-Worker Earning/ year (30%+ 1 share)		**268861**	Depreciation		8571	
Owner cum Worker Earning/Month		22405	Interest Expenses		5600	**-14171**
			Nets (at least 6 types)	125000		
			Life of Nets (years)	5		
			Salvage Value	0		
			Depreciation		25000	
			Interest Expenses		5833	**-30833**
			Additional Expenses			
			Repairs for engines/Boat		7000	
			Annual Bonus for Crew		2000	
			Interest on Crew Advances (Rs.25000 *24%)		6000	**-15000**
All expenses on one Unit/Year	-46549		**Total Owner Expenses**			**-77021**
	-84000		**Net Annual Earning**			**191839**
	-77021	**-207570.29**	Net Monthly Earning			**15987**
Average Expense/Day across 200 days		**-1038**	Income Difference (Owner/Crew) Monthly			9713
			Income Difference (Owner/Crew) Yearly			116558

Figure 8.1: Pallithottam financial statements fisheries catch data analysis from 30 days to 25 days at sea (member-wise)



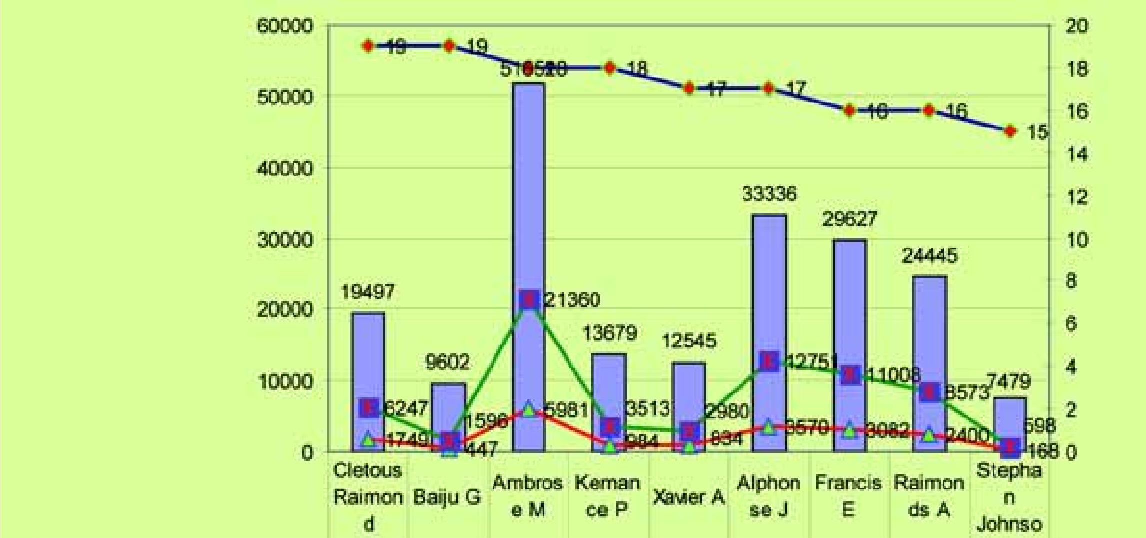
	Thomas P	Anthony A	Joseph Albert	Xavier J	Solomon A	Celestine M	Michael B	T. Joy	Stephan Pius
Average Catch per Month	22850	10538	53876	25329	11323	49196	30684	32131	37159
Monthly Earning (Crew)	2190	570	6273	2517	673	5657	3221	3412	4074
Monthly Earning (Owner)	7823	2036	22405	8988	2405	20205	11505	12185	14548
Average Catch/Day	30	30	29	28	28	27	26	26	25

Figure 8.2: Pallithottam financial statements fisheries catch data analysis from 24 days to 20 days at sea (member-wise)



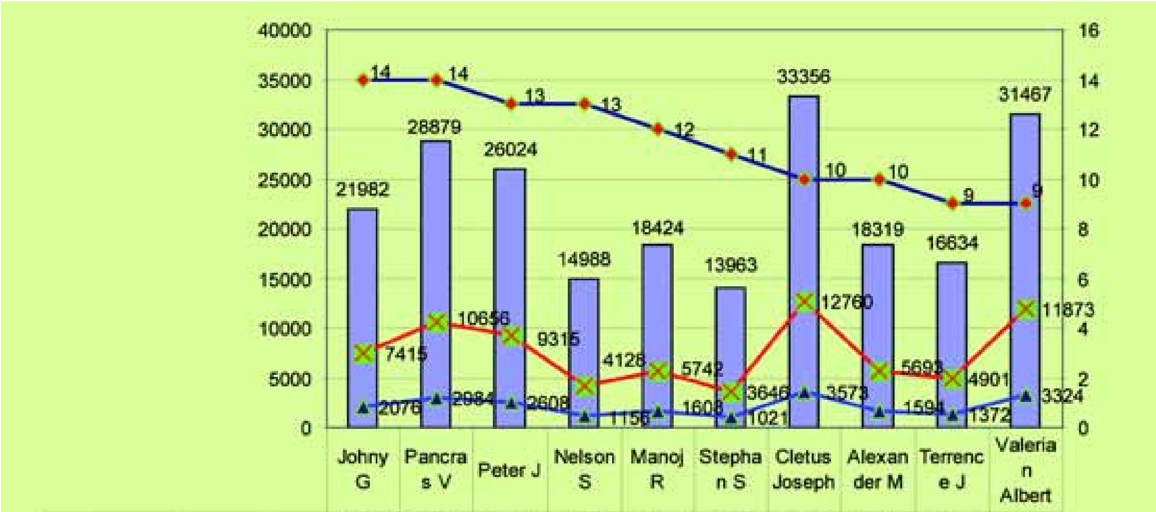
	Francis O	Jerome T	Joseph Vincent	Kunjumon G	Kunjappan L	Stephan Julian	Gilbert T	Cletus Albert	Cletus Alphones
Average Catch per Month	1794	19920	21062	8788	26637	50263	19754	23077	28605
Monthly Earning (Crew)	2051	1805	1955	340	2689	5798	1783	2220	2948
Monthly Earning (Owner)	7327	6446	6982	1214	9603	20707	6368	7930	10528
Average Catch/Day	24	24	23	22	22	21	21	20	20

Figure 8.3: Pallithottam financial statements fisheries catch data analysis from 19 days to 15 days at sea (member-wise)



	Cletous Raimond	Baiju G	Ambrose M	Kemance P	Xavier A	Alphonse J	Francis E	Raimonds A	Stephan Johnso
Average Catch per Month	19497	9602	51652	13679	12545	33336	29627	24445	7479
Monthly Earning (Crew)	1749	447	5981	984	834	3570	3082	2400	168
Monthly Earning (Owner)	6247	1596	21360	3513	2980	12751	11008	8573	598
Average Catch/Day	19	19	18	18	17	17	16	16	15

Figure 8.4: Pallithottam financial statements fisheries catch data analysis from 14 days to 9 days at sea (member-wise)



	Johny G	Pancras V	Peter J	Nelson S	Manoj R	Stephan S	Cletus Joseph	Alexander M	Terrence J	Valerian Albert
Average Catch per Month	21982	28879	26024	14988	18424	13963	33356	18319	16634	31467
Monthly Earning (Crew)	2076	2984	2608	1156	1608	1021	3573	1594	1372	3324
Monthly Earning (Owner)	7415	10656	9315	4128	5742	3646	12760	5693	4901	11873
Average Catch/Day	14	14	13	13	12	11	10	10	9	9

Annex 9: Traceability

Traceability is the collection, compilation, documentation, maintenance, application and use of information related to all processes in the supply chain so as to provide safety guarantee to various stakeholders (including consumers) with regard to the origin, location and life history of the fisheries product as well as for use in other purposes.

With respect to fisheries, traceability represents the ability to identify the specific place where the product was acquired through specific processes, sources of input materials, and tracking to determine the specific location and life history in the entire supply chain by means of verifiable records.

There are several important elements of traceability for fisheries products that emanate from the above and some these have implications for use of an efficient traceability process using ICTs:

(This has been compiled from several sources)

a) **Traceability of Product -** which determines the physical location of a product at all stages in the supply chain. Scope for using ICTs is good and mechanisms like ITC's e choupals or kiosks, choupal sagars can help but managing the outreach mechanism is the key. In other words, how to ensure a mechanism to regularly feed this information to the network is critical and even in the case of e choupals, the sanchalaks must be incentivised for the same. **Overall, this can be achieved.**

b) **Traceability of Inputs -** which determines type and origin (source, supplier) of inputs – this is more difficult as there would have to be a large amount of coordination apart from diversity of inputs and here is where incentivising the availability of accurate information may not be that easy. **It is perhaps easier as one moves down the chain but more difficult at the level of the fisherman. Challenge exists**

c) **Traceability of Process and Operations -** which ascertains the type and sequence of operations/ activities that have affected the product during the catching, post harvest and all other operations (what happened, where, and when). **Extremely difficult at farmer and somewhat difficult at local processor level. Challenge exists**

d) **Traceability of Diseases, Pests etc -** which traces the epidemiology of biotic hazards such as bacteria, viruses and other emerging pathogens that may contaminate food and other ingested biological products derived from fisheries raw materials. **Extremely difficult. Challenge exists.**

Annex 10: ICNW and SIFFS savings data analysis

Table 10.1: ICNW Savings Deposit - Fish Vendors Data

Year	No. of Members	Total Amount	Average/Per Person
2001	510	137753.05	270.10
2002	839	83122.50	99.07
2003	1271	114563.35	90.14
2004	1474	78612.10	53.33
2005	1866	115414.05	61.85
2006	1847	60014.15	32.49
Upto 30th, April, 2007	1694	24751.65	14.61

Figure 10.1: ICNW Fishers Vendors Savings (Year-Wise) Data

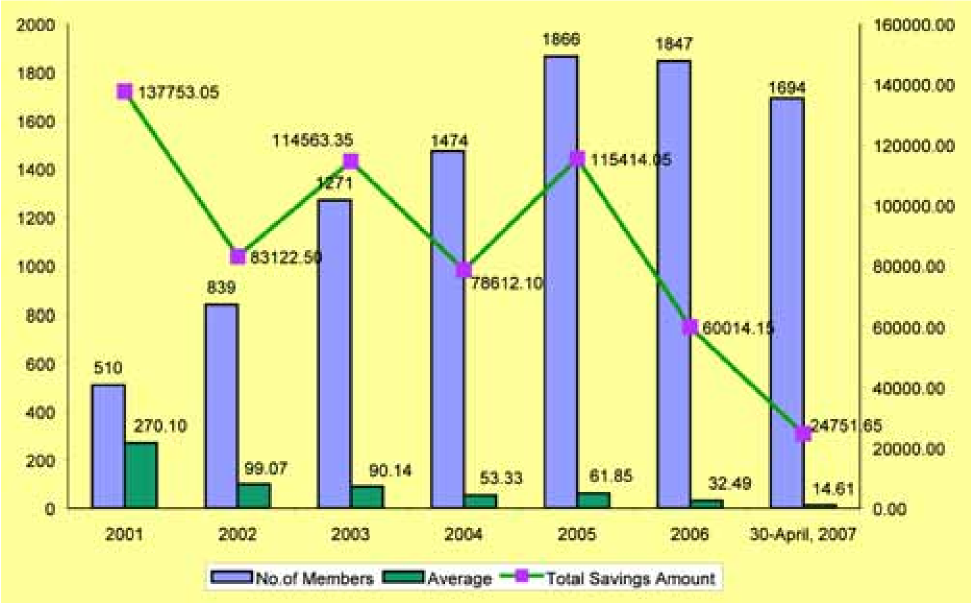


Table 10.2: SIFFS Men member savings (year-wise) – capture fisheries

Year	No. of Members	Total Savings Balance Amount	Average Balance Amount
2001	260	96700	371.92
2002	569	288853	507.65
2003	802	499660	623.02
2004	944	573290	607.30
2005	1055	457134	433.30
2006	1618	1044696	645.67
1st Jan-30Apr, 2007	1814	556171	306.60
Total	**7062**	**3516504**	**497.95**

Figure 10.2: SIFFS Men Member Savings (Year-Wise) – Capture Fisheries

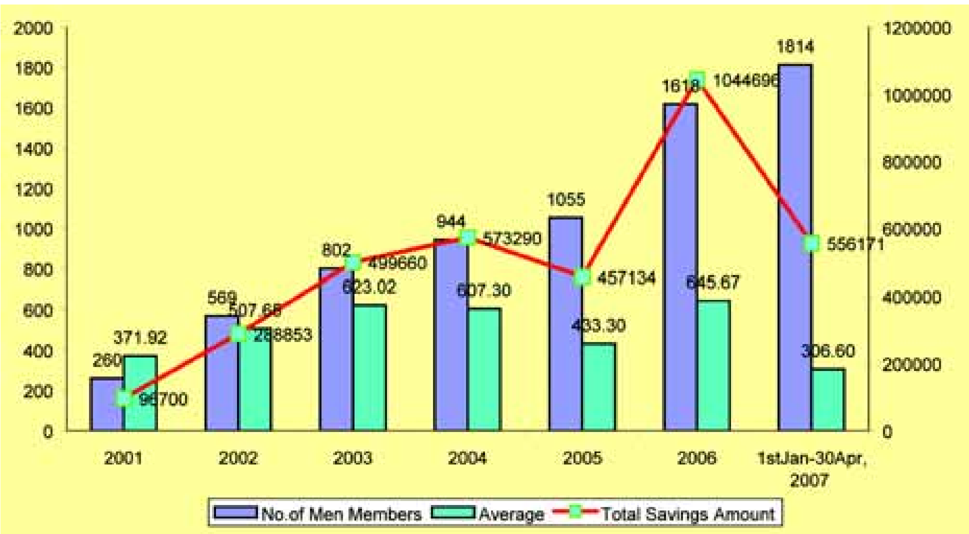
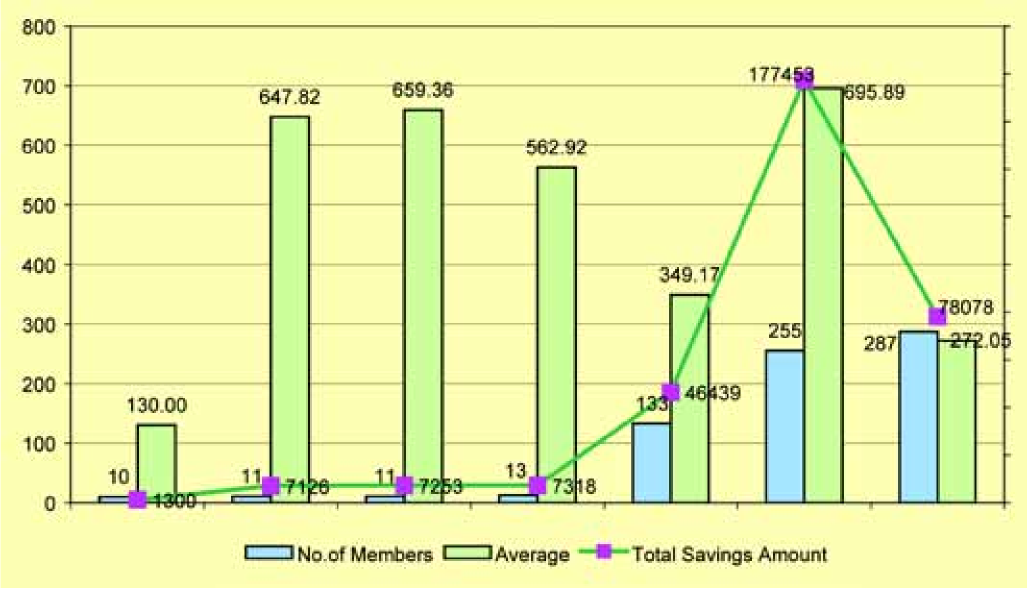


Table 10.3: SIFFS Women member savings (year-wise) – vending

Year	No. of Members	Total Savings Balance Amount	Average Balance Amount
2001	10	1300	130.00
2002	11	7126	647.82
2003	11	7253	659.36
2004	13	7318	562.92
2005	133	46439	349.17
2006	255	177453	695.89
1st Jan-30Apr, 2007	287	78078	272.05
Total	**720**	**324967**	**3317.21**

Figure 10.3: SIFFS Women Member Savings (Year-Wise) – Vending



Annex 11: SIFFS Individual Member Savings Details

Figure 11.1: Individual Savings Transactions Data Analysis

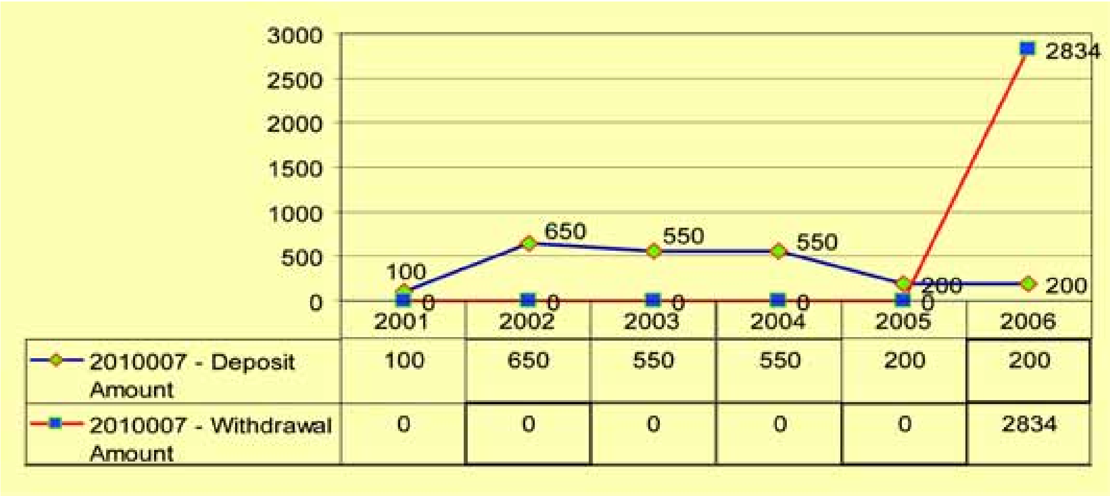
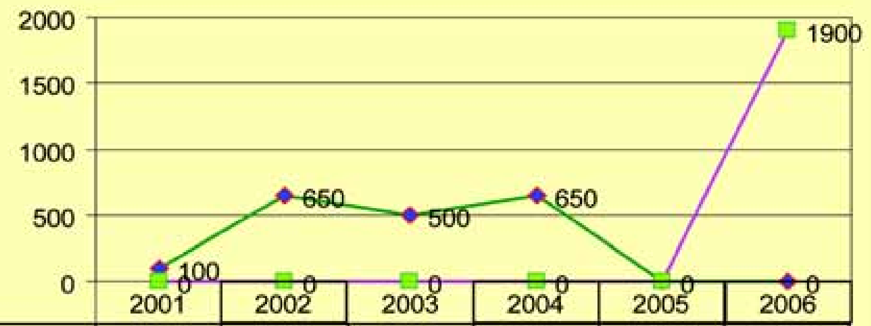
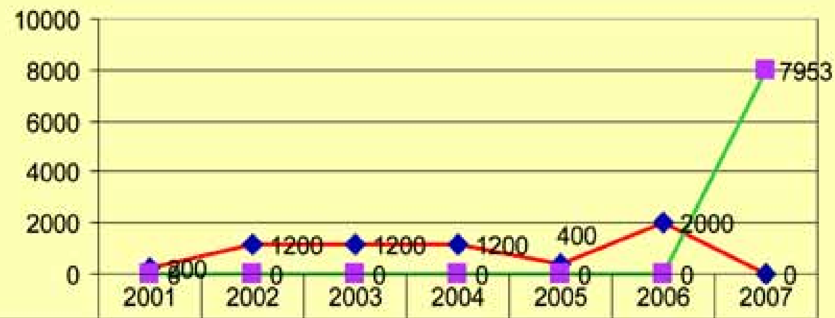


Figure 11.2: Individual Savings Transactions Data Analysis



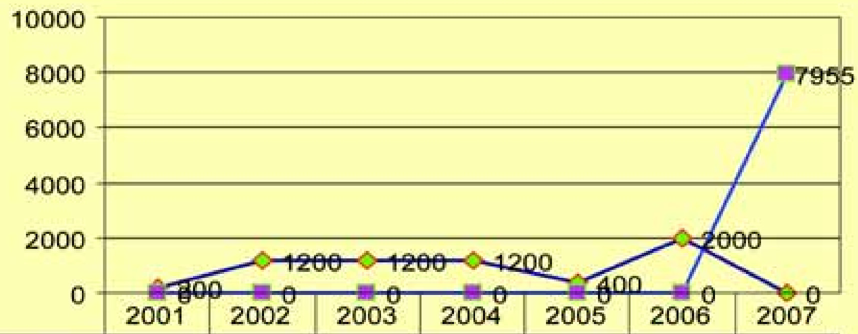
	2001	2002	2003	2004	2005	2006
2010029 - Deposit Amount	100	650	500	650	0	0
2010029 - Withdrawal Amount	0	0	0	0	0	1900

Figure 11.3: Individual Savings Transactions Data Analysis



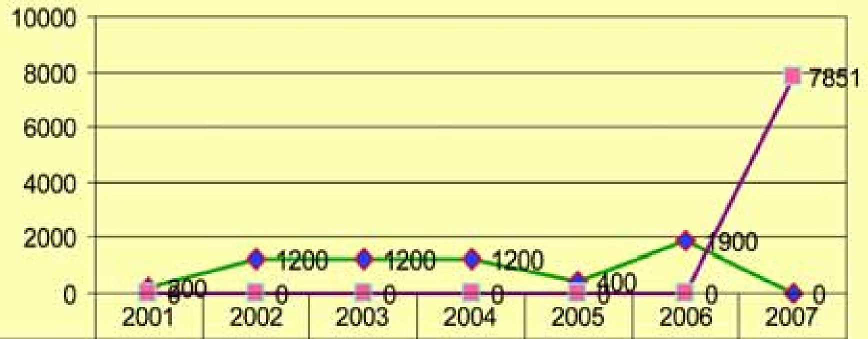
	2001	2002	2003	2004	2005	2006	2007
2170002 - Deposit Amount	200	1200	1200	1200	400	2000	0
2170002 - Withdrawal Amount	0	0	0	0	0	0	7953

Figure 11.4: Individual Savings Transactions Data Analysis



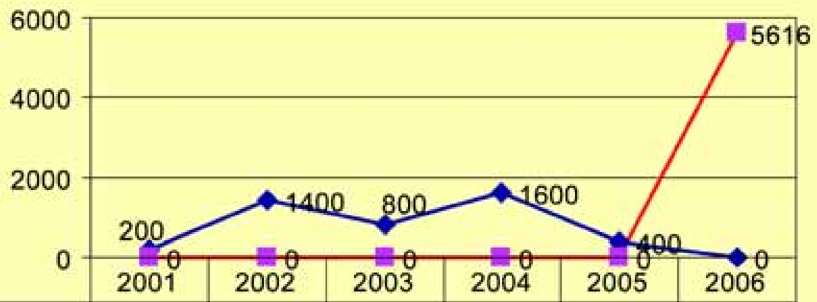
	2001	2002	2003	2004	2005	2006	2007
2170012 - Deposit Amount	200	1200	1200	1200	400	2000	0
2170012 - Withdrawal Amount	0	0	0	0	0	0	7955

Figure 11.5: Individual Savings Transactions Data Analysis



	2001	2002	2003	2004	2005	2006	2007
2170004 - Deposit Amount	200	1200	1200	1200	400	1900	0
2170004 - Withdrawal Amount	0	0	0	0	0	0	7851

Figure 11.6: Individual Savings Transactions Data Analysis



	2001	2002	2003	2004	2005	2006
2070024 - Deposit Amount	200	1400	800	1600	400	0
2070024 - Withdrawal Amount	0	0	0	0	0	5616

Figure 11.7: Individual Savings Transactions Data Analysis

	2001	2002	2003	2004	2005	2006
2010262 - Deposit Amount	100	650	600	400	0	0
2010262 - Withdrawal Amount	0	0	0	0	0	2108

Figure 11.8: Individual Savings Transactions Data Analysis

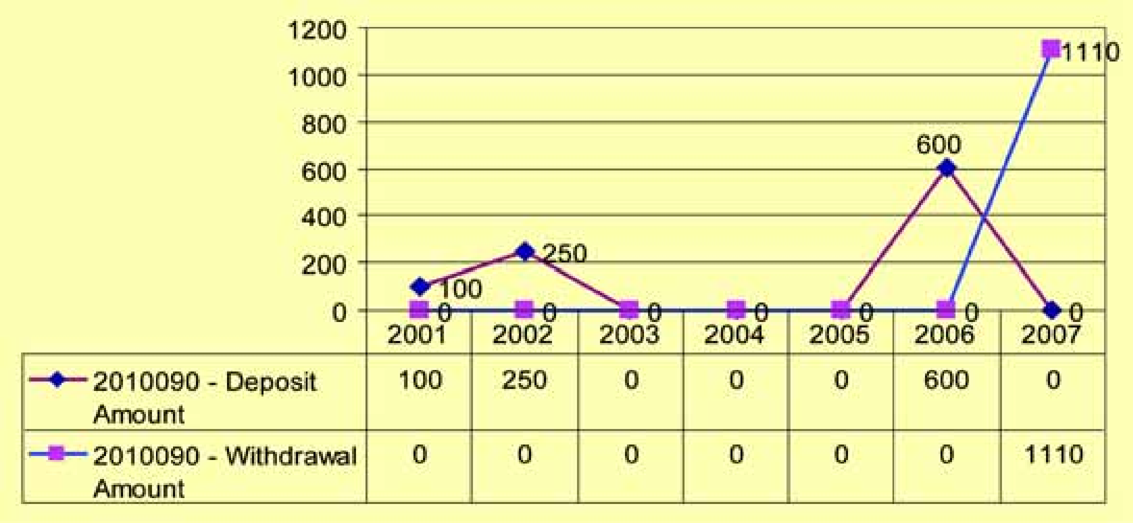


Figure 11.9: Individual Savings Transactions Data Analysis

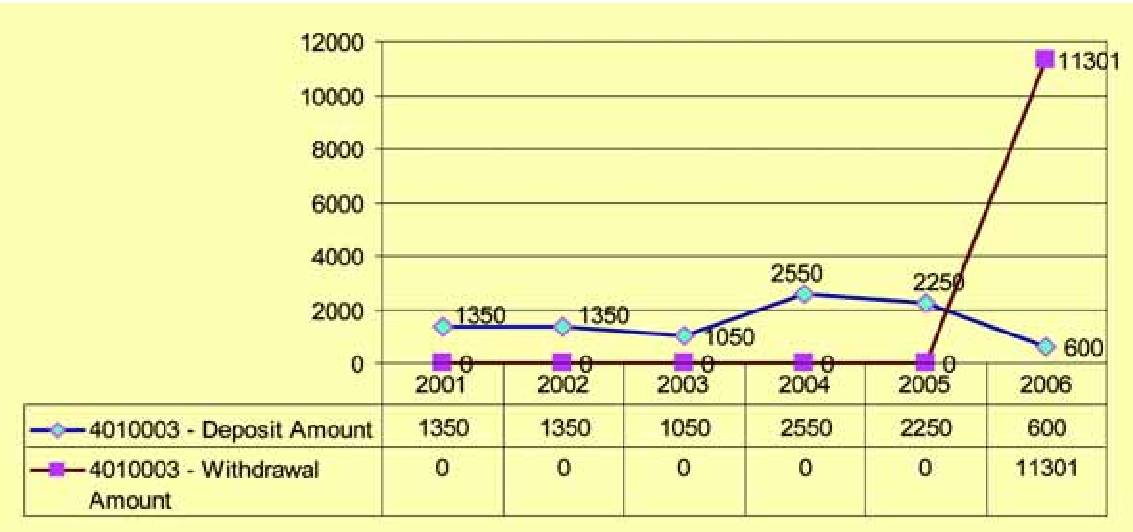


Figure 11.10: Individual Savings Transactions Data Analysis

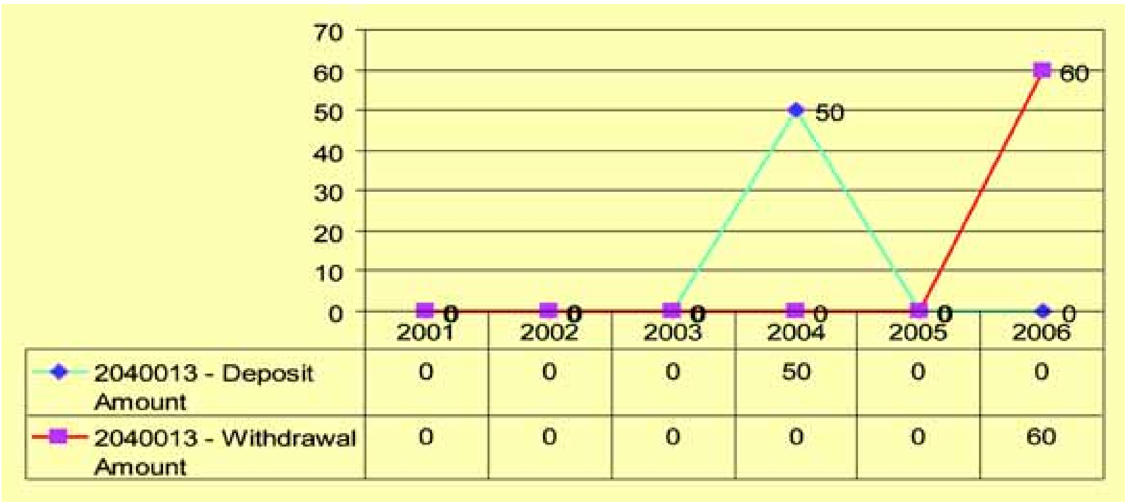
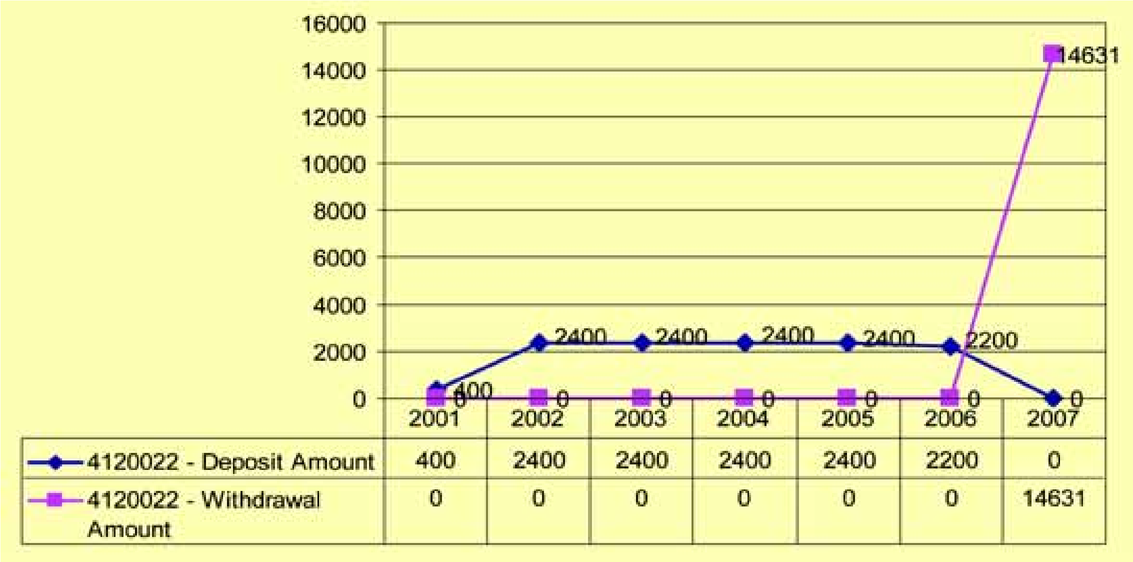


Figure 11.11: Individual Savings Transactions Data Analysis



	2001	2002	2003	2004	2005	2006	2007
4120022 - Deposit Amount	400	2400	2400	2400	2400	2200	0
4120022 - Withdrawal Amount	0	0	0	0	0	0	14631

Annex 12: Advantages, Disadvantages and Lessons on Warehouse Receipts Financing

Table 12.1 Advantage and Disadvantage of Warehouse Receipt Financing

Advantages	Disadvantages
For The MFI	
• **Decreased risk:** Warehouse receipts provide entrepreneurs with instant collateral to guarantee a loan. Having this type of collateral with a high market value is attractive to MFIs, which usually rely on group pressure to ensure loan repayment, especially when lending to first-time loan clients who do not have a proven track record.	• **Decreasing profitability:** Experience has shown that some warehouse receipt programs help market prices level out and the overall price remain steady. In methodologies where the loan amount is tied to the estimated worth of the product, a decreased price decreases the loan amount available to the producer and the interest that the MFI collects.
• **Reduce seasonal price variability:** The warehouse receipt system has the effect of smoothing out seasonal price variations throughout the year for a specific agricultural product. As this occurs, more people will become involved in the warehouse system, which can result in shorter and more competitive supply chains.	• **Warehouse operation:** This system works only if there are reliable warehouses in place. An MFI can establish or manage a warehouse, but experience has shown that this is usually not sustainable for the MFI. If an MFI must step in to build or manage a warehouse, it should proceed cautiously and add this cost to the price of its inventory credit program.
• **Liquidity:** Unlike real estate or other forms of collateral, the warehouse receipt is liquid. It can be converted into cash either at a bank or at the marketplace. This is especially attractive to MFIs, which may have difficulty collecting repayments from the producer.	
For The Entrepreneur	
• **Profitability:** Warehouse receipts allow small-scale producers to delay the sale of goods, allowing them to take advantage of large seasonal price swings for produce while obtaining cash when the harvest begins.	• **Speculation:** Warehouse receipts promote speculative activity on the seller's part because the producer tries to maximize profits by holding the produce until the price reaches its peak. Once the price peaks, the rush of additional inventories into the market causes the price to fall almost immediately. This practice may catch producers with more than half of their inventory selling at the lowest, instead of the highest, price. The net effect is to substantially decrease overall profits.
• **Price transparency:** A side effect of the warehouse system is that producer groups work together with the warehouse operator to establish prices based on the product's market value. This empowers producers by providing them with up-to-date information on prices throughout the season. The producers gain additional knowledge about current prices and can become "price setters" rather than "price takers."	• Shortage of small-scale drying or preservation technologies for agricultural products: This especially true in rural areas, where the technology can be scarce or expensive; as a result, the stored product is at risk for spoilage, loss from pests, and quality depreciation.
• **Food security:** Producers can realize savings by "buying back" their produce from the warehouse for home consumption during the lean season when food prices are high.	• An unreliable supply or shortage of storage chemicals that are needed to preserve agricultural goods can decrease the producer's total volume of usable produce and compromise the product's total value, thus decreasing the producer's ability to receive the best price for the produce.
	• Transporting of goods to the warehouse is an added expense to the producer. In rural areas where trucks and fuel are expensive and difficult to obtain, transporting the goods for storage in the next village or closest town poses a major chal lenge. High transport costs will make producers less likely to store their goods.

Source: *Adapted from "Bamako 2000 "Technical Note 5: Innovations in Microfinance"*

12.1 Key Requirements To Ensure A Successful System[42]

Implementing a successful warehouse receipt program can be done easily if a few key factors are in place. These are lessons learned from the experience of MFIs in Ghana, South Africa, and other African countries.

- **Build discipline and trust in the warehouse:** If the warehouse operator is trustworthy, MFIs can rely on the receipt with confidence as loan collateral. Trust in the warehouse also provides the entrepreneur with a sense of security.
- **Operate on a large scale:** The cost of warehouse receipt administration and oversight decreases with scale. The more warehouses available, the lower the cost of monitoring the system.
- **Understand that appropriate product pricing is critical for the MFI:** On average, the cost a producer is expected to carry—that is, the interest on the loan plus warehouse storage fees –typically averages around 25 percent of estimated total profits at the beginning of the harvest season. This is a very high percentage for MFIs to pass on to their customers. MFIs do need to charge what is necessary to cover their costs, but successful MFIs will look for ways to cut costs. One way is to work in a region where there are already established and trustworthy warehouses. Warehouse oversight and management are extremely costly and almost never sustainable when the MFI manages the process.
- **Advocate for appropriate regulation and supervision of the sector:** Regulation is critical to the success of warehouse receipts, and government must be committed to finding the correct balance of regulatory oversight. There are two main approaches to regulation: the minimalist approach, which involves low regulatory oversight, and the maximum approach, which involves high regulatory oversight.
- The **minimalist approach** allows banks to individually screen and oversee warehouse operators without government oversight. It is typically an efficient process, but it usually works when there are large clients in ports or other urban areas. Because of the high cost of maintaining and overseeing this system, MFIs cannot sustain the system. Very rarely does this system reach into rural areas.
- The **maximum approach** advocates for national government oversight to oversee warehouses and institute a national grading system. This system takes the oversight burden off the MFI and often allows for the spread of inventory credit into rural areas. This system, however, needs an efficient and non-corrupt governing body to provide appropriate oversight.

12.2: Lessons For MFIs/POs from Warehouse Receipt Financing[43]

To ensure a successful warehouse receipt system, MFIs need to be more involved in the system than simply giving loans based on the collateral presented.

- Understand annual price cycles and monitor market prices closely to remain knowledgeable about the real value of the product being stored;
- Identify buyers early so the MFI and the producer are aware of the buyer’s needs concerning quality and quantity when the season begins;
- Ensure that the producer handles the product appropriately;
- Manage risk by taking in stocks only over a specified time period and within strict price guidelines;
- Control grain quality;
- Develop detailed sales agreements that include specifics on pricing, packaging, quality, point of delivery, and contract duration;
- Ensure clear and complete internal communications; and
- Monitor government policies and actions in the sector.

---

[42] *Source: Adapted from “Bamako 2000 “Technical Note 5: Innovations in Microfinance”*

[43] *Source: Adapted from “Bamako 2000 “Technical Note 5: Innovations in Microfinance”*