



# Role of Microfinance on Coastal Indebtedness in Marine Fisheries Sector of Maharashtra, India

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## Abstract

The Microfinance Institutions (MFIs) and Self Help Groups (SHGs) play a pivotal role in Indian marine fisheries sector in reducing indebtedness among marine fisherfolk. This paper makes an attempt to assess the extent of indebtedness among marine fisherfolk in mechanized, motorized and traditional fisheries sectors and the impact assessment of MFIs on coastal indebtedness in Maharashtra. The study was carried out in five coastal districts of the state. Situational analysis was done through participatory learning and action (PLA) in the selected locations and the sample respondents (n=600) were selected from mechanized, motorized and traditional sectors. The results showed that the level of indebtedness of members of MFIs was less compared to non-members. In certain cases, even though indebtedness was more, the repayment capacity was found to significantly improve in MFIs. There is an extreme necessity of strengthening MFI ventures in the traditional, secondary and tertiary fisheries sectors in the state. A comparative assessment of the sources of credit, the purposes of credit and the utilisation pattern of loans in the state also was undertaken to draw valid conclusions. It was also found that the MFIs were ranked better in most of the attributes in the perception of stakeholders compared to banks and non-institutional credit sources.

**Keywords:** Microfinance, indebtedness, credit, self help groups, marine fisheries sector

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## Introduction

The extent of coastal rural indebtedness in the marine fisheries sector is quite observable throughout the Indian coastal belts. The Microfinance Institutions (MFIs) / Self Help Groups (SHGs) mobilized in marine fisheries sector do play a vital role in reducing the vicious circle of indebtedness among marine fisherfolk. An exact assessment on the indebtedness level among marine fisherfolk has not so far been attempted. The extent and quantum of indebtedness at a reasonable level of interest sourced out from the organised sector is an indicator of development since availability of finances boosts up the economic activity and capital formation in a region. The extent of indebtedness and the average outstanding debt per indebted households are comparatively less among fishermen as per the figures of institutional sources, but the affairs of the fisherfolk is really grim as they are virtually gripped in the hands of non-institutional agencies, namely the money lenders and traders for which legitimate data sources do not exist. Fisherfolk are attracted to the non-institutional agencies on account of simple procedures, timeliness in availing finance and for operational expenses which ultimately trap them in the vicious circle of indebtedness. Even when fisheries sector possesses a major role in earning foreign exchange, the fisherfolk are still in the lower strata of the society because of indebtedness and are in the clutches of non-institutional credit agencies. As cheap credit is essential for development of Indian marine fisheries sector, microfinance institutions play a distinct role in this regard to offer low cost credit and thereby save the fisherfolk from permanent debt trap.

In Maharashtra, there are 81 492 fishermen families with a population of 3 86 259. The maximum number of families are in Thane district (26 821), followed by Raigad district (24 026). There are 456 marine fishing villages wherein fishermen reside.

The total number of landing centres is 152 of which 91% belonged to traditional fishermen. The average number of families in a village is 179, with 847 persons per village. Women form 49% of the population with 953 females per 1 000 males. There are about 15 509 households below poverty line (CMFRI, 2010).

Mammoo (2004) in a study on income, indebtedness and savings among fisherfolk of Udayapur and Gopalpur of Odisha under BOBP Programme says that fishing communities know two distinct credit sources: the traditional/informal and the institutional/formal. Traditional sources include money-lenders, middlemen, fish traders, boat owners, shopkeepers and pawn brokers. Institutional sources are mainly banks and cooperatives. Khan et al. (2005) in a case study undertaken on fisheries sector indebtedness in Baluchistan and Sindh of Pakistan, observed an empirical link between poverty and indebtedness and the mean debt to income ratio in low income group of fisherfolk was 3:4. Yunus (1999), the pioneer of microfinance projects in Bangladesh said the microfinance system enabled thousands of people by offering poor people loans, some fear it could lead to over-indebtedness, but microfinance has benefited the wider economy.

Dynamics of twelve women's Self Help Groups in marine fisheries sector of Malabar area of Kerala was studied and a strategy for mobilisation of an effective Self Help Group was developed by Vipinkumar (2007). Sathiadhas (2009) has conducted micro level socio economic studies on indebtedness in selected fishing villages in different maritime states in India. Jayaraman (2005) undertook the performance analysis of fisherwomen Self Help Groups in Tamil Nadu and reported women SHGs played a substantial role in alleviating poverty and indebtedness in fisheries sector. In this context, the microfinance institutions /Self Help Groups of fisherfolk do have a pivotal role in reducing the indebtedness in the marine fisheries sector. This study is an attempt to assess the extent of indebtedness among marine fisherfolk in mechanized, motorized and traditional sectors as well as to assess the impact of microfinance on rural indebtedness in marine fisheries sector, the role of credit agencies in providing credit, the credit utilization pattern as well as repayment behaviour of marine fisherfolk.

## Materials and Methods

Identification of appropriate locale for data collection in Maharashtra through Participatory Learning and Action (PLA) was the major activity undertaken in the first phase. Finalization of the data collecting protocol with all essential parameters was done in the second phase. The background planning for the situational analysis through PLA, identification of suitable microfinance institutions, data collection on credit utilisation behaviour and indebtedness level in Maharashtra state were undertaken in the subsequent phases. Data were collected from member fisherfolk of MFIs and non members from five districts of Maharashtra *viz.*, Sindhudurg, Ratnagiri, Thane, Greater Mumbai and Raigad representing the entire segments of fishing population comprising mechanised (34%), motorised (25%) traditional (17%), secondary (15%) and tertiary sectors (10%). From the districts selected, a total of 12 MFIs were selected and the data were collected through personal interview with a pre-tested and standardized data collecting protocol on the level of indebtedness. Any mobilized group venture with a productive economic activity initiated by thrift deposits and sustained by an appropriate microenterprise either independently or by the intervention of an external agency is considered an MFI for the study. The sampling distribution/plan of the present study with 600 respondents is presented in Table 1.

Table 1. Sampling distribution in Maharashtra

| Sector      | Total Respondents | Non MFI Members | MFI members |
|-------------|-------------------|-----------------|-------------|
| Mechanised  | 200               | 120             | 80          |
| Motorised   | 150               | 110             | 40          |
| Traditional | 100               | 60              | 40          |
| Secondary   | 90                | 70              | 20          |
| Tertiary    | 60                | 40              | 20          |

To study the comparative appraisal of perception of fisherfolk on MFIs, institutional and non institutional credit sources in terms of selected attributes, the respondents were asked to assign ranks to each of the attributes. Garrett's Ranking Technique (GRT) was used to identify and rank the attributes on the functioning of MFIs. The percent position of each rank was converted into scores as per Garret & Woodworth (1969).

## Results and Discussion

The level of indebtedness and repayment particulars in Maharashtra are presented in Table 2. There was a substantial difference in the level of indebtedness across the non-member and member fisherfolk of MFIs on account of their higher repayment capacity, less risk involvement and easiness in availing credit. The level of indebtedness was 19% and it was lesser for members of MFIs and their repayment capacity was to the tune of 8%. The level of indebtedness among non-members of MFIs was 21%. The table also shows that the members of MFIs have more repayment percentage in the traditional sector, equal to non-members in motorized sector and less in the mechanised sector.

The above findings gave a clear indication that MFI members have lesser level of indebtedness compared to non-members in mechanised and motorised sectors. But the MFI ventures on non-motorised sector have to be strengthened.

The savings of the respondent households are indicated in Table 3. The saving details of the respondents' households indicated that 62.33% of the respondents had no savings and 36% of the respondent households possessed savings of less than Rs. 0.50 lakhs. All sampled fishers of Ratnagiri

and Sindudurg reported that they had no savings. Lack of savings is related to the need for indebtedness for the sustenance of the livelihoods. In Greater Mumbai district, 34.4% households did not save, while 77.78% and 8.15% households did not save in Thane and Raigad districts, respectively. The average savings of Greater Mumbai household was found to be Rs.11 680/- followed by Raigad with Rs. 2 993/- and Thane with Rs. 1 931/-. The plight of respondent households from Ratnagiri and Sindhudurg is well understood where none of them possess savings.

The indebtedness of respondent households across the five districts of Maharashtra is presented in Table 4. The average amount of debt per person was Rs. 20 501/-. The indebtedness was highest in Raigad district with an amount of Rs. 31 428/- per person and the repayment also was found to be zero. In Ratnagiri, on account of the savings channelized for the repayment of loans, indebtedness was found to be the least. In Sindhudurg, not a single respondent had repaid the amount borrowed and it could be because of the fact that the maximum number of respondents among the five selected districts was from Sindhudurg and there were no savings at all and a considerably higher level of indebtedness was noticed in the district.

Table 2. Level of indebtedness and repayment in Maharashtra

| Sector      | Indebtedness in lakhs (Rs.) |                 | % of Repayment |                 |
|-------------|-----------------------------|-----------------|----------------|-----------------|
|             | Non-members                 | Members of MFIs | Non-members    | Members of MFIs |
| Mechanised  | 0.39                        | 0.26            | 12             | 10              |
| Motorised   | 0.24                        | 0.17            | 8              | 8               |
| Traditional | 0.06                        | 0.11            | 6              | 12              |

Table 3. Savings details of respondent households

| Districts      | No. of respondents having savings |                 |                    | Total |
|----------------|-----------------------------------|-----------------|--------------------|-------|
|                | Nil                               | < Rs. 0.50 lakh | Rs. 0.50-1.00 lakh |       |
| Greater Mumbai | 43                                | 72              | 10                 | 125   |
| Thane          | 70                                | 20              | -                  | 90    |
| Raigad         | 11                                | 124             | -                  | 135   |
| Ratnagiri      | 90                                | -               | -                  | 90    |
| Sindhudurg     | 160                               | -               | -                  | 160   |
| Total          | 374                               | 216             | 10                 | 600   |

Table 4. Indebtedness of sample respondents

| Districts      | Indebtedness      |                                 |                             |
|----------------|-------------------|---------------------------------|-----------------------------|
|                | Number of Persons | Average amount per person (Rs.) | Average amount repaid (Rs.) |
| Greater Mumbai | 114               | 20 240                          | 5 161                       |
| Thane          | 83                | 15 910                          | 5 046                       |
| Raigad         | 126               | 31 428                          | Nil                         |
| Ratnagiri      | 26                | 8 700                           | 8 700                       |
| Sindhudurg     | 119               | 14 962                          | Nil                         |
| Total          | 468               | 20 501                          | 2 041                       |

The indebtedness often results in availing loans from different institutions. The sources of lending include banks, co-operatives, private money lenders, friends/relatives, fish traders, boat owners, shop keepers, jewel-loan providers and microfinance. The details of the sources of money lending as availed by the respondent households is furnished in Table 5. It was found that banks constituted the major source of loans with 35.32% of the respondent households availing credit from banks. Other sources like *Patpedhi*, National Cooperative Development Corporation (NCDC), fishermen societies, fish traders, boat owners, shop keepers, jewel loan providers, Pen Urban and LIC also provided credit to 25.08% of the sample respondents. It was also noticed that the same 25.08% of loan was availed from microfinance and it shows the remarkable growth status and significance of MFIs, creating a profound influence in providing credit to fisherfolk. Out of the 200 MFI members selected as respondents, 156 members availed loan from MFIs.

However, the banks ranked the top because the amount of loan being granted through MFIs is less compared to the banks.

Cooperatives were of lesser significance as a lending organization, with only a few of the respondents availing loan in Sindhudurg district. In this district, respondents also availed loans from private money lenders, friends/relatives in addition to banks.

The details of the purpose of availing loans by the respondent households across all the five districts are presented in Table 6.

It was found that of the loans availed by the respondent households, 43.84% of respondents availed loan for purposes like business and purchasing vehicles followed by the purchase of craft/ gear and other fishing related equipments (42.35%) which is a clear indication that loans are being utilized for NPAs (Non Performing Assets) to the major extent than for which they were intended to be utilized in fisheries activities. This is also in agreement with the findings of the report on assessment of literacy, income and health status of fishers in India (CMFRI, 2012). Throughout the coastal belts of India, the same feature was noticed in the study of Vipinkumar et al. (2013), that one of the major purposes for which the loans are being utilized by the fisherfolk was for NPAs and non-fisheries activities like asset creation and social obligations.

The appraisal on the functioning of the MFIs/ institutional/non-institutional credit agencies is presented in Table 7. It was found that majority of the respondents ranked better for the attributes such as easy approval process, diverse areas of funding,

Table 5. Sources of lending to fisherfolk in Maharashtra

| Sources   | No. of respondents in districts |       |        |           |            |       | %     |
|---|---------------------------------|-------|--------|-----------|------------|-------|-------|
|   | Gr. Mumbai                      | Thane | Raigad | Ratnagiri | Sindhudurg | Total |       |
| Banks   | 38                              | 16    | 98     | 3         | 64         | 219   | 35.32 |
| Cooperatives  | -                               | -     | -      | -         | 8          | 8     | 1.29  |
| Private money lenders   | -                               | 2     | -      | 4         | 10         | 16    | 2.57  |
| Friends/relatives   | 14                              | 38    | 2      | 5         | 8          | 67    | 10.77 |
| Others: fish traders, boat owners, shop keepers, jewel loans etc. | 17                              | 81    | 45     | 2         | 11         | 156   | 25.08 |
| Microfinance  | 52                              | 43    | 24     | 12        | 25         | 156   | 25.08 |

provision of longer duration loans, provision of loan grace periods and easy repayment schedule, low interest rate, less stringent for default of payment, limited hidden cost and concerns and need for collateral security. By comparing the functioning of the MFIs/ institutional/non-institutional credit agencies, from the table it is evident that, the MFIs/SHGs are ranked better in functioning by the respondents followed by institutional and non-institutional credit agencies.

It could be observed that the level of indebtedness among members of MFIs is less compared to non-

members of MFIs. Level of indebtedness in non-members of MFIs was almost 3 times of MFIs. Per household indebtedness in Maharashtra is approximately 0.21 lakhs and level of indebtedness is 78%. Even when the indebtedness is high, the repayment capacity of MFIs is found to be more. This is in agreement with the findings of Yunus (1999), who was a pioneer in using microfinance as a tool for the upliftment of people in 80 000 villages of Bangladesh and he pointed out that while microfinance in India has lots of growth potential, regulatory changes are required and an independent regulator needs to be set up to monitor the cases of abuse.

Table 6. Purpose of availing loans by coastal fisherfolk in Maharashtra

| Purpose   | No. of respondents in districts |       |        |           |            |       | %     |
|---|---------------------------------|-------|--------|-----------|------------|-------|-------|
|   | Gr. Mumbai                      | Thane | Raigad | Ratnagiri | Sindhudurg | Total |       |
| Purchase of craft/ gear and other fishing related equipment | 23                              | 66    | -      | 30        | 108        | 227   | 42.35 |
| House construction/ land purchase                           | -                               | 12    | 24     | 6         | -          | 42    | 7.84  |
| Marriage expenses   | -                               | -     | -      | 6         | -          | 6     | 1.12  |
| Education   | -                               | -     | -      | 6         | 2          | 8     | 1.49  |
| Health and social security                                  | -                               | 12    | -      | -         | 6          | 18    | 3.36  |
| Any others (Business & purchase of vehicles)                | 91                              | 24    | 108    | -         | 12         | 235   | 43.84 |

Table 7. Appraisal of the functioning of the MFIs/institutional/non-institutional credit agencies

| Attributes                       | Institutional |      | Non-institutional Credit |      | Microfinance Institution |      |
|----------------------------------|---------------|------|--------------------------|------|--------------------------|------|
|                                  | Score         | Rank | Score                    | Rank | Score                    | Rank |
| Easy approval process            | 53.8          | II   | 41.8                     | III  | 56.0                     | I    |
| Diverse areas of funding         | 48.3          | II   | 41.4                     | III  | 60.8                     | I    |
| Eligibility of recipients        | 64.8          | I    | 52.0                     | II   | 37.3                     | III  |
| Maximum loan amount              | 45.4          | II   | 58.0                     | I    | 43.9                     | III  |
| Need for collateral security     | 53.3          | II   | 56.9                     | I    | 44.1                     | III  |
| Provision of longer loans        | 52.8          | II   | 42.5                     | III  | 59.7                     | I    |
| Provision of loan grace periods  | 53.9          | II   | 43.4                     | III  | 57.5                     | I    |
| Easy repayment schedule          | 52.9          | II   | 41.7                     | III  | 56.6                     | I    |
| Low interest rate                | 59.7          | I    | 41.4                     | III  | 48.6                     | II   |
| Stringent for default of payment | 45.9          | II   | 58.7                     | I    | 44.8                     | III  |
| Hidden cost and concerns         | 52.5          | II   | 59.0                     | I    | 41.6                     | III  |



Though the majority of the respondents are indebted to banks, MFIs were also found to possess a significant position in providing cheap credit to a considerable extent in Maharashtra even though the magnitude of the loan provided through MFIs was less compared to banks. But SHG-bank linkage had a pivotal role in successful entrepreneur capacity building of fisherfolk. Tripathi & Sharma (2007) conducted an impact assessment of SHG-Bank Linkage Programme on Financial Behaviour of Rural Poor in Raebareli District in Uttar Pradesh to address the issue of sustainable development of the rural poor through SHG-Bank linkage using participatory approach. The study also revealed that fishermen are most often trapped under debt to fish traders and they are not able to come out from the trap. Microfinance institutions/self help groups significantly reduced the dependence of fisherfolk on private money lenders and considerably reduced the indebtedness level and increased their repayment capacity. The results of the study are in agreement with impact assessment study of MFIs in Karnataka coastal belts (Vipinkumar & Swathilekshmi, 2012). MFIs considerably assisted the fisherfolk in meeting their expenditure of purchasing of nets, repairing boats and for buying other accessories. By comparing the appraisal of the functioning of the MFIs/institutional/non-institutional credit agencies, it is evident that the MFIs/SHGs are ranked better in functioning by the respondents followed by institutional and non-institutional credit agencies. The MFIs/SHGs played an important role in improving the savings behaviour of the fisherfolk, but it could not help the fisherfolk to come out completely from the clutches of indebtedness. Non-institutional credit agencies still hold good across the sectors. Non Performing Assets (NPAs) creation existed to a great extent as loans are being used for non-fisheries activities like asset creation and social obligations. Another important inference which could be drawn from the study was that, as the level of indebtedness of MFIs in the traditional sector was much higher than non-MFIs, there is an extreme necessity of strengthening the MFIs in the traditional sector because 91% of the fisherfolk households come under the category of traditional sector in Maharashtra. Therefore, concerted efforts in this direction to strengthen MFIs in the traditional and tertiary sectors are inevitable for better entrepreneurial capacity building through mobilized group ventures in Maharashtra.

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