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ORIGINAL ARTICLE





ROLE OF INSTITUTIONAL FINANCE IN MOTORISED MARINE FISHING SECTOR IN THOOTHUKUDI DISTRICT OF TAMILNADU

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Abstract:

Finance plays a crucial role in accelerating any business activity/economic development and fisheries sector is not an exception. The economic activities of the fishing villages mainly depend upon the availability of credit at reasonable cost to enhance production and income. Lack of institutional credit is an obstacle to further development of the small-scale fisheries sector. In this context the researcher has attempted to study the credit needs of the fishermen, various sources of institutional credit availed by them and their experience with financial institutions.

This is an empirical study completed through field study. Thoothukudi District has been selected as the study area. In the study area only 152 respondents have accessed the various institutional agencies and availed 250 loans for meeting the expenditures. The data were collected using a survey schedule. Mean, standard deviation, co-efficient of variation and the One-way ANOVA were used. It is inferred that most of loans are availed from the Cooperative banks (42%) followed by Commercial banks (21%). The vallam craft owners have borrowed the highest number of loans followed by catamaran and FRP boat owners. From the analysis it could be understood that majority of the loans availed from the financial institutions are less than Rs.25, 000 and the financial institutions fail to come forward to provide higher loan amount for the craft owners. Consequently for want of further loans they fall in the clutches of middlemen. Thus it is clear that the financial institutions play a very little role in bringing up the economic status of the fishermen in Thoothukudi District.

KEYWORDS:

financial institutions, indebtedness, capital expenditure, fishermen sangams, National Cooperative Development Corporation, collateral securities.

INTRODUCTION:

Coastal fisheries have the characteristics of common pool resources and are subject to the problem of common pool resource dilemmas. Common property or common pool resource is a form of resource management in which a well-delineated group of competing users participates in extraction or use of a jointly held, fugitive resource according to explicitly or implicitly understood rules about who may take how much of the resource (Stevenson, 1991). Fishing as an occupation has been in vogue since time immemorial. Till recently it was reckoned to a supplementary enterprise practiced by fishermen community on subsistence level with little external input (Krishnan et al 2000).

The extent of indebtedness in marine fisheries sector is quite notable throughout the coastal belts of the country. Finance plays a crucial role in accelerating any business activity/economic development and fisheries sector is not an exception. The economic activities of the fishing villages mainly depend upon the availability of credit at reasonable cost to enhance production and income. Credit is vital in all spheres of

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ROLE OF INSTITUTIONAL FINANCE IN MOTORISED MARINE FISHING.......



activities including production, harvesting, preservation, processing, transportation and marketing segments.

The credit requirements for fishing activity may be varied depending on the purpose. As such the credit needs of the fishermen are increasing day by day. In fisheries, credit institutions often finance the introduction of new technologies, such as outboard engines, new boats and gears etc. However, small investors have little access to formal sector, mainly because of lack of adequate collateral security and perceived risks of fisheries investments and very bad credit repayment history. Lack of institutional credit is an obstacle to further development of the small-scale fisheries sector. In this context the researcher has attempted to study the credit needs of the fishermen, various sources of institutional credit availed by them and their experience with financial institutions.

NEED FOR CREDIT

The seasonal variations in the fish catch, newer and increasingly superior fishing technologies, and increasing costs of fishing inputs, aggressive fishing, overcrowding etc, have resulted in uncertainty of income from fishing and fishing related occupations. The overall output remains the same but the investment and operational costs have gone up considerably. This has resulted in fishermen becoming increasingly dependent on more loans to finance their expenditures and also using loans as coping mechanisms. The credit requirements of the fishermen may be classified as to capital expenditure, running expenses and other expenditure.

a. Capital expenditure includes expenditure incurred in the purchase or replacement of craft, nets, engine, and other accessories.

b.Running expenses or working capital expenditure includes expenditure incurred for repairs and maintenance of craft, nets and engine, ice, fuel, food etc., and for fish vending as well as other petty trade and income generating activities.

c.Other expenditure includes personal and family expenses such as food, clothing, medical, marriage, education etc.,

OBJECTIVES

The objectives of the study are as under:

- 1. To study the socio economic status and the amount of institutional finance availed by the fishermen in Thoothukudi District.
- $2. \ To \ understand \ the \ source \ and \ amount \ of \ institutional \ loans \ availed \ in \ the \ study \ area.$
- 3. To suggest the strategies for further development of fishermen in Thoothukudi District.

RESEARCH METHODOLOGY

This is an empirical study completed through field study. Thoothukudi District has been selected as the study area. Thoothukudi district has 21 fishing villages. Sampling has been made only for the motorized craft at selected fishing villages. The selection of the villages is based on the criteria of minimum number of crafts and the type of crafts available in the particular fishing villages. Fishing villages which are having less than 25 fishing crafts are not included in the sample. The motorized crafts are classified into three types namely Catamaran, Fibre Reinforced Plastic (FRP) boat and Vallam. About ten per cent of the craft population of the respective villages has been taken into account for sampling. In the study area only 152 respondents have accessed the various institutional agencies and availed 250 loans for meeting the expenditures. The data were collected using a survey schedule. Mean, standard deviation, co-efficient of variation and the One-way ANOVA were used.



TABLE 1
Amount of Institutional Finance Availed According to Age

	Number of	Instituti	utional Finance Availed			
Age (In Years)	Respondents	Mean (Rs. in '000)	SD (Rs. in '000)	CV (%)		
Below 25	10	28.85	19.15	66.38		
25 – 34	45	52.24	45.46	87.02		
35 – 44	47	84.90	102.88	121.18		
45 & Above	50	60.50	75.21	124.31		
Total	152	63.52	77.12	121.41		

Source: Primary Data

The average amount of loan availed in the institutional finance is the highest (Rs 84,900) for 35-44 years age category and the lowest (Rs 28,850) for below 25 age category .The co-efficient of variation is the highest (124.31%) for 45 & above age category and the lowest (66.38%) for below 25 age category .To find out whether there is any significant difference in the mean values of loans availed in the institutional finance among the various age groups, the following null hypothesis was framed and tested.

H0: The average amount of institutional finance availed does not vary significantly with regard to the age of the respondents.

To find out whether there is any significant difference in the amount of institutional finance availed according to the age of the respondents One-way ANOVA is applied and the result is presented in Table 2

TABLE 2
ANOVA for the Institutional Finance Availed According to Age

Source of Variation	Sum of Squares	Df	Mean Square	Calculated F Value	Table Value	Inference at 5% Level
Between Groups	39693.249	3	13231.083			
Within Groups	858267.753	148	5799.106	2.282	2.666	H ₀ : accepted
Total	897961.002	151				

Source: Primary Data

The ANOVA result shows that the calculated value is 2.282 which is less than the Table value of 2.666 at 5% level of significance. Since the calculated value is less than the Table value, the null hypothesis is accepted. Hence it is inferred that there is no significant difference in the amount of institutional finance availed according to the age of the respondents.

$AMOUNT\ OF\ LOAN\ AVAILED\ IN\ INSTITUTIONAL\ FINANCE\ AND\ LITERACY\ STATUS$

To measure the amount of loans availed in the institutional finance according to literacy status of



the respondents; the mean, standard deviation and the co-efficient of variation are calculated and are elucidated in Table 3

TABLE 3
Amount of Loan Availed in Institutional Finance
According to Literacy Status

	Number of	Institutional Finance Availed			
Literacy Status	Respondents	Mean	SD	CV	
		(Rs. in '000)	(Rs. in '000)	(%)	
Illiterates	21	35.95	26.49	73.69	
Primary	71	56.72	66.02	116.4	
Middle school	47	84.17	102.05	121.24	
Above middle school	13	70.54	70.61	100.1	
TOTAL	152	63.52	77.12	121.41	

Source: Primary Data

The mean value of loan availed in the institutional finance was the highest (Rs. 84,170) for the middle school category and the lowest for (Rs. 35,950) for the illiterates category. The co-efficient of variation was the highest (121.24%) for the middle school category and the lowest (73.69%) for the illiterates category. Thus, it is evident that though the average amount of institutional finance availed by the respondents with middle school education is the highest, the variation in the availing of finance is the highest among them. The coefficient of variation for the entire group of respondents is also higher which reflects the higher variation in the institutional finance availed by them.

To find out whether there is any significant difference in the mean values of loans availed in the institutional finance among the different literacy categories, the null hypothesis is framed and tested.

H0: The average amount of loan availed in the institutional finance does not vary significantly with regard to the literacy status of the respondents.

One way ANOVA is applied to find out whether there is any significant difference in the loan amount availed in the institutional finance according to the literacy status of the respondents. The ANOVA result is shown in Table 4.

TABLE 4
ANOVA for the Institutional Finance Availed
According to Literacy Status

Source of Variation	Sum of Squares	Df	Mean Square	Calculated F Value	Table Value	Inference at 5% Level
Between Groups	39925.344	3	13308.448			
Within Groups	858035.658	148	5797.538	2.296	2.666	H ₀ : accepted
Total	897961.002	151				

Source: Primary Data



The ANOVA result shows that the calculated F ratio value is 2.296 which is less than the Table value of 2.666 at 5% level of significance .Since the calculated value is less than the Table value, the null hypothesis is accepted. Hence it is inferred that there is no significant difference in the amount of loan availed in the institutional finance according to the literacy status of the respondents.

AMOUNT OF LOAN AVAILED IN THE INSTITUTIONAL FINANCE AND EXPERIENCE IN FISHING

To measure the amount of loan availed in the institutional finance according to the experience of the respondents in fishing, the mean, standard deviation and the co-efficient of variation are calculated and are presented in Table 5.

TABLE 5
Institutional Finance Availed According to Experience in Fishing

		Institutional Finance Availed				
Total Experience	Number of Respondents	Mean (Rs. in '000)	SD (Rs. in '000)	CV (%)		
Below 20 Yrs	55	54.81	51.38	93.74		
20 - 30 Yrs	58	81.35	97.21	119.5		
Above 30 Yrs	39	49.28	70	142.05		
Total	152	63.52	77.12	121.41		

Source: Primary Data

The mean amount of loan availed in the Institutional finance was the highest (Rs. 81,350) for those with 20-30 years experience and the lowest (Rs. 49,280) for those who had above 30 years experience. The co-efficient of variation was the highest (142.05%) for above 30 years category and the lowest (93.74%) for below 20 years category. To find out whether there is any significant difference in the mean amount of loan availed in the institutional finance among the different categories of experience of the respondents, the following null hypothesis is framed and tested.

H0: The average amount of loan availed in the institutional finance does not vary significantly with regard to the experience in fishing.

One way ANOVA is applied to find out whether there is any significant difference in the amount of loan availed in the institutional finance according to the experience in fishing. The result of ANOVA test is portrayed in Table 6.



TABLE 6 ANOVA for the Institutional Finance Availed According to Experience in Fishing

Source of Variation	Sum of Squares	Df	Mean Square	Calculated F Value	Table Value	Inference at 5% Level
Between Groups	30532.731	2	15266.366			
Within Groups	867428.271	149	5821.666	2.622	3.036	H ₀ : accepted
Total	897961.002	151				

Source: Primary Data

The ANOVA result shows that the calculated F ratio value is 2.622 which is less than the Table value of 3.036 at 5% level of significance. Since the calculated value is less than the Table value, the null hypothesis is accepted and hence it is inferred that there is no significant difference in the amount of loan availed in the institutional finance according to the experience in fishing.

SOURCE OF INSTITUTIONAL FINANCE

A number of agencies have been providing financial assistance for various projects and schemes being operated in the fishing sector. The Government of India and State Governments have been providing financial assistance which is being utilized for the development of common infrastructure, training and research institutes, landing and berthing facilities, welfare schemes / development programmes etc. Government agencies like MPEDA, Fish Farmers Development Agencies etc., provide assistance / incentives for fish/shrimp farming, besides technical and extension support.

Commercial Banks, Cooperative Banks, Regional Rural Banks, State Financial Corporations, etc. also provide short, medium and long term financial assistance for fish farming, shrimp / prawn farming, fishing boats, nets, deep sea fishing vessels etc. National Bank for Agriculture and Rural Development (NABARD) and National Cooperative Development Corporation (NCDC) provide refinance assistance to the State Government, State Cooperative Banks and Commercial Banks for assisting various fisheries activities by the individual cooperative societies etc. The main focus of NCDC is to augment the income of active fishermen. In order to discharge these functions effectively, NCDC has formulated specific schemes and pattern of assistance for enabling the fisheries cooperative to take up the activities related to production, processing, storage, marketing etc. Such assistance is provided to fishermen cooperatives on liberal terms treating the activity as weaker sections programmes.

The various sources from which the fishermen avail credit can be broadly categorised as organized and unorganized sectors. In the study area the fishermen have accessed the organized (Institutional) sector which includes the Commercial Banks, Cooperative Banks, Regional Rural Banks, Fisheries Cooperative Societies, Tuticorin Multipurpose Social Service Society (TMSSS) and other fishermen sangams; and the unorganized (Non-institutional) sector which includes private money lenders, auctioneers, commission agents and friends and relatives. In the study area the government programmes like motorization of country crafts and FRP boat scheme were implemented through formal credit agencies.



TABLE 7 Source and Sector-wise Institutional Loans Availed

Source of Finance	Number of Loans Availed						
	Catamaran	FRP Boat	Vallam	Total			
C	16	11	26	53			
Commercial banks	(20.51)	(15.94)	(25.24)	(21.20)			
C	37	38	30	105			
Cooperative banks	(47.44)	(55.07)	(29.13)	(42.00)			
Fisheries cooperative	2	3	16	21			
society	(2.56)	(4.35)	(15.53)	(8.40)			
Dagional munal handra	4	2	26	32			
Regional rural banks	(5.13)	(2.90)	(25.24)	(12.80)			
F:-1	19	15	5	39			
Fishermen sangams	(24.36)	(21.74)	(4.85)	(15.60)			
	78	69	103	250			
Total	(100)	(100)	(100)	(100)			
	[31.2]	[27.6]	[41.2]	[100]			

(Figures in parentheses are percentages)

[Figures in square brackets are sector-wise percentage of loans availed to total loans]

Source: Primary Data

Table 7 shows source-wise institutional loans availed by the respondents of various sectors. Out of 250 loans availed, majority (42%) of the loans have been availed from the cooperative banks followed by commercial banks (21%) proving easy accessibility than any other formal credit agency. The respondents had availed 16%, 13% and 8% of the loans from fishermen sangams, RRBs and FCS respectively. Sector wise analysis shows that cooperative banks were the major source of finance irrespective of the type of craft followed by commercial banks except in vallam sector where fishermen sangams were the major source of finance next to cooperative banks. Generally institutional credit agencies provide credit on the basis of collateral securities. Vallam craft owners have better access to the institutional sources comparatively and this is due to the financial soundness to produce collateral securities in comparison to other craft owners.

Thus it is inferred from the above table that most of loans are availed from the Cooperative banks (42%) followed by Commercial banks (21%). The vallam craft owners have borrowed the highest number of loans followed by catamaran and FRP boat owners.

AMOUNT OF INSTITUTIONAL FINANCE AVAILED

The amount of institutional loans available to the respondents depends on various factors such as poverty, security, surety, social contacts and credit worthiness. The institutional agencies are reluctant to advance loans even on personal security of the fishermen. The fishermen sangams have fixed a maximum limit to the amount they would lend which hardly exceeds Rs.20,000 for catamaran and Rs. 50,000 for FRP boat.

The sector-wise amount of institutional Finance availed by the respondents is furnished in Table $8\,$



TABLE 8 Sector-wise Amount of Institutional Finance Availed

Amount of Loan	Number of Loans Availed					
(Rs. in '000)	Catamaran	FRP Boat	Vallam	Total		
L 4h 25	57	37	45	139		
Less than 25	(73.08)	(53.62)	(43.69)	(55.6)		
25 50	18	20	29	67		
25 – 50	(23.08)	(28.99)	(28.16)	(26.8)		
51 100	3	10	14	27		
51-100	(3.85)	(14.49)	(13.59)	(10.8)		
Above 100	0	2	15	17		
Above 100	(0)	(2.9)	(14.56)	(6.8)		
T 4 1	78	69	103	250		
Total	(100)	(100)	(100)	(100)		

(Figures in parentheses are percentages)

Source: Primary Data.

It is observed in Table 8 that out of 78 loans availed by the catamaran sector, about 73 per cent of the loans were less than Rs.25,000, 23 per cent of the loans were ranging between Rs.25,000 and Rs.50,000 and about 4 percent of the loans were ranging from Rs.51,000 to Rs. 1,00,000. In case of fibre boat sector out of 69 loans availed, about 54 percent of the loans were less than Rs.25,000, 29 percent of the loans were ranging between Rs.25,000 and Rs.50,000, 14 percent of the loans were under the category of Rs.51,000 to Rs.1,00,000 and about three per cent of the loans availed were above Rs. 1,00,000. In Vallam sector out of 103 loans availed, about 44 per cent of the loans were less than Rs.25,000, 28 percent of the loans were under the category of Rs.25,000 to Rs.50,000 and 14 percent of the loans were in between Rs.51,000 and 1,00,000 and 15 percent of the loans were above Rs.1,00,000.

From the above analysis it could be understood that majority of the loans availed from the financial institutions are less than Rs.25, 000 and the financial institutions fail to come forward to provide higher loan amount for the craft owners. Consequently for want of further loans they fall in the clutches of middlemen. Thus it is clear that the financial institutions play a very little role in bringing up the economic status of the fishermen.

CONCLUSION

Fishery is the one the enterprise has provide job opportunity to motorized crafts fishermen. Among the various sources of institutional finance, the regional rural banks and cooperative banks were easily approached by the fishermen. The rate of interest is not only relatively low but different for different purposes. The ANOVA result indicates that there is significant difference in the amount of institutional finance availed according to type of fishing craft and personal assets owned. The study shows that majority of the institutional loans availed are secured either by primary or collateral securities and about 50% of the loans are secured by jewels. The ANOVA results as regards age, educational status and experience of the respondents infer that there is no significant difference in the amount of institutional finance availed and the percentage of loan repaid. Thus it is clear that the financial institutions play a very little role in bringing up the economic status of the fishermen.



SUGGESTIONS

- 1. To bring awareness and guidance on fisheries sector, several Government agencies established and working in the country should develop a networked relationship.
- 2. The activities of several such institutions should be made known to the fishermen, specially the motorized crafts used by fishermen who are covered in this study.
- 3. There has to be a dialogue between the fishermen and the research institutions who are working on technology up gradation.
- 4. Financial institutions like NABARD & similar others have to work on a model of reaching the targets.
- 5. Role of women in fishing sector to be properly handled and duly rewarded. This is where the researcher would like to admit one important limitation of his study as he failed to recognize the importance of women from his study.
- 6. Training on value addition to the younger generation as well as the women participants.
- 7. Though difficult, it is necessary to have a dialogue with the fishermen before finalizing any major industrialization & infrastructure project, in order to avoid inconvenience to either of the parties.
- 8. Involving the young generation of fishermen in coastal guard & securities systems.
- 9. Providing the requisite training to such promising youngster on the basis of their willingness to cooperate.
- 10. Effective marketing arrangement which will help in improving the economic condition of the small scale fishermen.
- 11. Encouragement of group loans, as fishermen as group are observed to be better repayers.
- 12. Training of fishermen in improved fishing methods thus helping them increasing income.
- 13. Inculcating the habits of thrift among the fishing community.
- 14. Increasing the general awareness about the opportunities in fishing industry as well as the role of individual fishermen in it.

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