

**An Assessment of the Viability of
State Sponsored Fisheries Credit Schemes:
A Study of
Two Fishing Communities in
Southern Sri Lanka**

W.A.G. Wanasinghe and O. Amarasinghe

Faculty of Agriculture
University of Ruhuna
Mapalana
Kamburupitiya

ABSTRACT. *This study aims at finding out the viability of fisheries credit schemes sponsored by the state. Data were collected from state banks, Ministry of Fisheries, money lenders, fish merchants and craft owners in two fishing villages in the south of Sri Lanka: Dondra and Mirissa. Results revealed that state credit schemes suffer heavy losses due to high rate of loan default (54.87%), high administrative costs (18%), and low rate of interest (18%). The state banks should charge at least an interest rate of 75.47% to cover the total lending cost, which is the current break even interest rate. While results of this study highlight the need for increasing the present rate of interest charged on fisheries loans, other measures attempting at minimizing political and administrative corruption and administrative inefficiencies are also of paramount importance in increasing rates of repayment and reducing lending costs.*

INTRODUCTION

Sri Lanka is a developing country in which agriculture provides not only food for the population, but also the means of living for the majority. The limited amount of cultivable land is under severe stress in meeting the food needs of the increasing population. In the search for new food sources, attention is directed at exploiting the aquatic resources of the country. The fishery is one such resource where there exist vast possibilities for further exploitation.

Total fish production in the country amounted to 237,550 Mt in 1995. About 125,000 people are employed in the fisheries sector, who earned Rs. 3,647.88 million of foreign exchange through the exports of marine fish

products in 1995; its contribution to the total exports of the country was 1.87%. It added a value of Rs. 16,604 million to the Gross National Product (GNP) in 1995; a contribution of 1.8 percent. Yet, when compared to the contribution of agriculture to the GNP of Sri Lanka (17.20% in 1995), the contribution of fisheries is rather small. While coastal waters are heavily exploited, the off-shore and deep sea fisheries resources still remain under-exploited and a vast amount of inland water bodies can be exploited for the development of inland fisheries. It is evident that the fisheries sector has not yet been able to make a significant impact on the country's economy though vast possibilities do exist.

However, the total fish production in the country in mid fifties, which remained at 25,000 Mt, has recorded a 9.5 fold increase by 1995, mainly as a result of state intervention in fisheries development since early 1950's. This intervention was characterized by heavy investments in mechanizing the traditional crafts, introduction of new mechanized crafts and gear, development of fisheries infrastructure, designing subsidy schemes, *etc.* Today, more than half of Sri Lanka's fishing fleet (approximately 55 percent) remain mechanized.

Adoption of the new technology, especially the mechanized crafts and accompanying gear, requires a large capital outlay and small-scale fishermen do not have sufficient funds to meet such high investment costs. Therefore, there exist a high demand for credit among asset-poor fishermen. Moreover, these expensive crafts and gear depreciate rapidly and are operated in a hazardous environment with a high degree of loss or damage at sea (Amarasinghe, 1989; Wanasinghe and Amarasinghe, 1995). Yet, institutes providing insurance against fishing-related risks are unlikely to emerge in fisheries due to the presence of problems of moral hazard and adverse selection, which are incentive problems caused by informational asymmetries between the insurers and insurees. Under such circumstances, credit performs a dual function; a credit function and an insurance function. Nevertheless many fishermen, whose assets consist of crafts and gear which are subject to the risk of damage or loss at sea, are not acceptable to many lenders as proper collateral because they entail collateral specific risks. It is due to the above reasons that state sponsored credit programs assume a significant importance in the development of the fisheries sub-sector of Sri Lanka.

Vast amounts of credit have been channelled to small scale fisherman (more than 900 million during the last two decades) through state banks and the Ministry of Fisheries and Aquatic Resources with low interest rates and easy terms. However, in a capital deficient country like Sri Lanka, the viability of credit programs is under threat due to the high opportunity cost of capital and increased administrative costs. The present paper makes an attempt to find out

the viability of state sponsored credit programs to fisheries giving due consideration to the actual costs of lending incurred by state banks and the interest rates charged from borrowers.

MATERIALS AND METHODS

Cost of lending credit (lending cost) can be defined as the sum of opportunity cost of capital, administrative cost of lending and a risk premium. The risk premium carries with it the destructive effect of non-repayment. This can be shown as:

$$Lc = f + a + RP \quad (1)$$

where, Lc = Lending cost (%),
 f = Opportunity cost of capital (%),
 a = Administrative cost (%), and
 RP = Risk premium

Risk premium can be further defined as:

$$RP = \left(\frac{d}{1-d}\right) (1 + f + a) \quad (2)$$

where, d = default rate (%)

Therefore,

$$Lc = f + a + \left(\frac{d}{1-d}\right) (1 + f + a) \quad (3)$$

The break-even rate of interest indicates the rate at which a financial institution of the lending cost of a credit scheme. The profit or loss of a credit scheme can be expressed as;

$$r = i - Lc \quad (4)$$

where, r = rate of return (%),
 i = interest rate charged on loans (%), and
 Lc = lending cost (%)

To determine the "break-even" rate of interest, the profit or returns function, r , is equal to zero. Thus,

$$r = i - Lc = 0$$

Then $i^* = Lc$

(where i^* is the break-even interest rate and Lc the lending cost)

Thus,

$$i^* = f + a + \left(\frac{d}{1-d}\right)(1 + a + f) \quad (5)$$

Study area

This study was carried out in two fishing villages: Dondra and Mirissa, in Southern Sri Lanka. Primary data were collected through informal discussions with state banks, money lenders and fish merchants while a structured questionnaire was administered to a sample of 68 craft owners in Dondra and 52 craft owners in Mirissa. Secondary data were collected from the Central Bank of Sri Lanka and Ministry of Fisheries.

RESULTS AND DISCUSSION

Lending cost analysis

Fishermen in the study area can secure their credit needs from several sources; the village money lender, fish merchant, kin and friends, fisheries cooperative and state banks. The two state banks in the study area, the Bank of Ceylon and the People's Bank operate several credit schemes for fisheries and it is evident from Table 1 that all craft owners prefer formal credit provided by the state banks to credit provided by informal sources. This is mainly because of the low rates of interest charged on loans and the possibility of obtaining large credit amounts from state banks. However, unlike the informal suppliers of credit, the state lending institutions incur a high cost in the operation of credit schemes and the present analysis of lending cost attempts at assessing the viability of such credit programs. Success and viability of any credit program usually depend on high rate of repayments, high rate of interest and low administrative cost. In fact, default has a multiplicative effects on lending cost.

Table 1. Preference for various sources of credit by craft owners in Dondra and Mirissa.

Source of credit	NMTC		MTC		FRP		ODOC		MDOC	
	D	M	D	M	D	M	D	M	D	M
State Banks	100%	50%	50%	87%	50%	67%	75%	100%	48%	94%
Cooperative	0%	43%	25%	13%	0%	33%	0%	0%	0%	6%
Fish Merchant	0%	0%	25%	0%	50%	0%	25%	0%	52%	0%
Money Lender	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Kin and / or friends	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%

Source: sample informants, 1993

D - Dondra

M - Mirissa

NMTC

= Owners of Non-mechanized traditional crafts.

MTC

= Owners of mechanized traditional crafts.

FRP

= Owners of 17-23' fibreglass boats with outboard engine.

ODOC

= Owners of 28-32' crafts with inboard engine.

MDOC

= Owners of >32' multi-day crafts with inboard engine.

Cost of administration of loans include all costs, capital and recurrent, incurred by the lending institutions in the implementation of a credit program. Administrative costs, also, make high attempts to police the use of loan. Supervised credit, which aims at monitoring the use of loans may entail significant administrative costs. The staggered loan disbursement to many individual borrowers could also entail additional costs which would contribute to high lending costs.

The average costs of lending schemes operated by state banks in the south of Sri Lanka can be computed using Equation 3. The officials of the regional branches of People's Bank and Bank of Ceylon which serve the study area were asked to work out the administrative costs in respect of fisheries credit programs. This was an arduous task because administrative costs can usually be worked out for a particular lending institution as a whole which is usually engaged in the operation of many credit programmes and an array of other banking services. However, after taking into consideration all their activities, credit amounts handled and the costs involved, the above banks came out with a figure of 18% as cost of administration of fisheries loans. The opportunity cost of capital is considered at the interest rate on Government

treasury bills. The weighted average yield rate of treasury bills (for 12 months) during the loan disbursement period under consideration (1982-1995) was 15.60% per annum.

The above sources of information also revealed that the default rate during 1982-1995 was 54.87%. Information obtained from the sample of craft owners in Dondra and Mirissa on reasons for loan defaulting are presented in Table 2. Since fisheries loans are often lent against collateral such as group guarantees of fishermen, mutual guarantees or fishing assets which are subject to damage or loss at sea (and therefore entail high collateral-specific risks) the lender is often in a weak position in taking legal action against the defaulter. Even when terms and conditions of loans are strictly laid down, they are not followed properly in lending when the borrower is able to use influence. A second reason for loan defaulting appears to be administrative and political corruption. Information provided in Table 2 also reveal that some bank officials appear to turn a blind eye on defaulters who bribe them in cash or kind. Finally, the defaulters may even turn to their political party leaders to use influence on bank officials to delay or suspend legal action against them.

Substituting the rate of default of 54.87% in equation 3, the lending cost (Lc) of fisheries credit schemes in the Southern Province is estimated to be 75.47%.

It is quite apparent from the above that costs of lending of formal credit in the fisheries sector in the south of Sri Lanka are considerably high. While, the oft-noted phenomena of overstaffing and low labour productivity in state institutions may account for a considerable share of administrative costs, it is also clearly shown that defaulting of credit proves very costly to the government lending institutions.

Break-even point of interest

Another problem in a small-borrower credit program is concessionary interest rates. The benefits of low rates of interest are not fully documented. It is even argued that low rates of interest on loans do not help the rural poor, as concessionary rates encourage lenders to favour large loans in order to lower average lender costs per unit of money lent. In this way, low rate of interest policies inhibit the development of rural financial markets and lead to further income concentration and inefficient allocation of resources.

Table 2. Reasons for defaulting of loans obtained from state banks by craft owners in both Dondra and Mirissa.

Reasons for loan defaulting	NMTC	MTC	FRP	ODOC	MDOC
Weak position of lender in taking legal actions due to improper collateral	12%	18%	26%	58%	34%
Loan repayment delayed until fellow borrowers repay their loans	18%	15%	22%	45%	40%
Bribing the officials to resort to no-action or late-actions against loan defaulting	8%	14%	19%	28%	52%
Use of political influence to exert pressure on state officials to delay legal action against loan defaulting or to resort to no-action	0%	11%	6%	12%	35%

Source: Sample informants, 1993.

NMTC = Owners of Non-mechanized traditional crafts.
 MTC = Owners of mechanized traditional crafts.
 FRP = Owners of 17-23' fibreglass boats with outboard engine.
 ODOC = Owners of 28-32' crafts with inboard engine.
 MDOC = Owners of >32' multi-day crafts with inboard engine.

Given the nominal rate of weighted average interest of 18% and lending cost of 75.47% during the loan disbursement period, the profit earned by the fisheries credit schemes in the Southern Province can be determined as;

$$r = i - Lc = 18 - 75.47 = -57.47\%$$

This is a negative rate of return or a very large loss. In real terms, this loss would be increased further as the interest rate charged on loan decreases in value due to inflation.

Using the average repayment rate of small-scale fishermen in Southern Province, which is 45.13%, the overall break-even rate of interest collected at the same time of loan disbursement, i^*_D , can be determined as follows:

$$i^*_D = \frac{f + a + \frac{d}{1-d} (1 + f + a)}{1 + f + a + \frac{d}{1-d} (1 + f + a)}$$

$$i^*_D = 75.47\%$$

This means that the state banks in the south of Sri Lanka are able to recover their lending cost of fisheries credit schemes only if they charge an interest rate of 75.47% from the borrowers. Politically, this break-even rate will be difficult to impose. Since many state sponsored credit programs have been designed with a view to help the asset-poor fishermen to adopt modern fishing technology which is highly capital intensive (such as mechanized crafts and improved gear), the interest rates were kept fairly low to attract fishermen. Yet, the results of this study show that the nominal interest rate of 18% is too low for the credit scheme to be viable because it is way below the break-even point.

The above calculations show that the returns to state credit programs for fisheries are highly negative. Significant financial losses are incurred mainly due to low rates of interest charged on loans and high default rates. Credit schemes cannot continue to survive with such performance.

CONCLUSIONS

State fishery credit schemes enjoy very low returns and are unlikely to be viable in the long run due to high default rate (54.9%), high administrative cost (18%) and low rate of interest (18%). In fact, the latter is sufficient only to recover administrative costs of lending. High default rates usually result from political and administrative corruption and granting of loans against improper collateral. Although the importance of close administration of loans and the benefits of 'supervised credit' have often been highlighted, our results reveal that such measures would increase administrative cost of credit requiring further increases in interest rates charged on loans. This will make state sponsored credit unattractive to fishermen.

Given that credit is of paramount importance in helping the ordinary fishermen to adopt new fishing technology which demands large financial commitments, and that fish provides the most important source of animal

protein to the people of Sri Lanka, the fisheries sector should continue to receive help from the state in the form of credit. Although the results of this study reveal that the state suffers heavy losses from fisheries lending schemes, such losses can be minimized by adopting measures that would lower loan default rates and increase administrative efficiencies.

ACKNOWLEDGEMENT

We wish to acknowledge Sri Lanka Council for Agricultural Research Policy for providing financial help to carry out this research. We also wish to express our gratitude to Mr. L.M. Abeywickrama for helping us in the analysis of data.

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