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10 ECONOMICS OF TROLL LINE OPERATION DURING MONSOON IN MINICOY, LAKSHADWEEP

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Abstract

The Economics of troll line operation during monsoon is given based on the study carried out in 1999. The average initial investment of a troll line unit (5 m OAL with outboard engine of 9.9 HP) was found to be Rs.91, 000/-. The average share of a unit was 616 kg when the fuel was also supplied by the owner along with the craft, outboard engine and gear realising a revenue of Rs.28,880/-. But the share was 462 kg when the fuel was not supplied realising a gross income of Rs. 21,660/-. The gross profit in the former case was Rs.17, 880/- whereas in the latter case, it was gross income itself indicating the better profitability of the latter system.

Introduction

In Minicoy as in other islands of Lakshadweep, the fishing is aimed at tuna mainly and the major gears are pole and line using live bait fishes and troll line. During the fair season, *i.e.* from September to April/May, the main gear is pole and line and troll lines are operated either from the same unit enroute to the pole and line fishing ground or when the pole and line operation is suspended due to inclement weather or poor catch. But during monsoon *i.e.* from June to August, the pole and line operation is fully suspended and the craft will be beached for maintenance. During this period, troll lines are operated from small wooden boats of 5 m OAL fitted with outboard engines of 9.9 HP. The fishing during this season is done on the eastern side quite adjacent to the island where the sea is comparatively calm because of the land barrier. Once the monsoon is over, these boats will be beached till the next monsoon. So in the present paper, the economics of this operation is worked out based on the data collected from June to August 1999.

Material and Methods

At present, there are 12 units of which all will not go in a day unless there is good fishing. In a unit, on an average 3 person go and each unit goes early in the morning and returns the same day in the evening. Immediately after the arrival of the unit, the catch is unloaded on the shore and is shared in numbers. So it is quite easy to take the catch and

effort data. Here the catch and effort data are taken on all the days except holidays. For the economics, the details regarding income and expenditure have been taken from all the boats. The investment was taken based on the value during 1998-1999.

Result

Investment pattern: The average investment for a troll line unit workout at Rs. 91,000/-

Annual fixed cost: Depreciation on craft, engine and gear and interest on capital form the fixed cost component. The annual depreciation was calculated at the rate of 5% for hull, 10% for engine and 33.3% for gear. As shown in the Table 1, the depreciation on a unit was worked out at Rs.12, 330/- and the annual interest at the rate of 15% worked out at Rs.13, 650/-. Thus, an amount of Rs.25, 980/- formed the annual fixed cost of a unit.

Operational cost: The operational expense relates to fuel charge only. Other expenses like fishermen's wage are paid through fish share at the time of landing itself. If there is no catch, these expenses need not be met by him.

The kerosene and petrol are supplied through the Minicoy Co-operative Supply and Marketing Society. The price for kerosene is Rs.3.80 per litre and for petrol it was Rs.38 per litre. Each boat needed about 30 l of kerosene and 0.5 l of petrol daily.

The operational cost worked out at Rs.11, 000/-

Catch and revenue: The average catch of a unit during the three months was 923 kg of which tuna catch was 827 kg and the rest was formed by others.

Sharing of catch: Of the total catch, 1/3 goes to the OBM if fuel is not supplied and the rest is shared equally into three with one share to the person supplied fuel, one share to the boat and one share to the fishermen. Along with the OBM, if the fuel is also supplied, then half of the catch goes to the OBM and the rest is shared among the fishermen and

boat. Here, generally the boat, OBM and gear belong to the owner and the fuel is also supplied by him invariably. Thus, the average shares of a unit in the case of craft and OBM without fuel was 462 kg and with fuels 616 kg. Thus, totally a revenue of Rs.28,880/- and Rs.21,660/- were realised at the rate of Rs.50/- per kg of tuna and Rs. 20 per kg of other fishes respectively with fuel and without fuel. The gross profit was Rs.17,880/- and Rs.21,660/- respectively with fuel and without fuel. As the operation is limited to three months, the net profit was found to be negative.

Conclusion

From the result, it is seen that the gross profit margin was more or less good. But the net profit was negative. This is mainly due to the fact that the unit is operated during monsoon only and the remaining months it is beached. As this season being a lean period, fish especially tuna is in great demand. So over and above the profitability, the driving force for the people to go in for these small units is to get fresh fish that too tuna at least for their consumption. This is further strengthened by the fact that once the pole and line operation begins, there will not be anybody to go in these units.

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TABLE 1. Cost and earnings of a Troll Line unit operation during monsoon in Minicoy

A. Initial investment	With fuel	Without fuel
Craft	40,000	
Engine	50,000	
Gear	1000	
Total	91,000	91,000
B. Catch (kg)		
Tuna	827	
Others Total	96	
	923	
C. Share of catch (kg)		923
Tuna	552	
Others	64	414
Total	616	48
		462
D. Revenue (Rs)	28,880	21,600
E. Operating cost fuel	11,000	---
F. Fixed cost		
Interest @15% Depreciation	13,650	
	2,000	Same
a. craft	10,000	
b. Engine	330	
c. Gear		
Total fixed cost	25,950	25,980
G. Total cost (E + F)	36,980	25,980
M. Gross profit (D - E)	17,880	21,600