

AgriCos e-Newsletter

e-Newsletter Open Access Multidisciplinary Monthly Online Magazine

Volume: 03 Issue: 03 March 2022 Article No: 13

Cost Analysis for Mechanized Steel Fishing Vessels of Nagapattinam Coast of Tamil Nadu

V. Durai¹ and M. Kalaiarasan²

¹Assistant Professor, Dr. MGR. Fisheries College and Research Institute, Thalainayeru – 614 712 ²Directorate of Incubation and Vocational Training Fisheries, Ramanathapuram – 623 519. Tamil Nadu Dr.J.Jayalalithaa Fisheries University, Nagapattinam, Tami Nadu

SUMMARY

Fishing operations has stopped when the state government every year have imposed the 61 days ban period on fishing by mechanised fishing boats along the east coast on April 15 to June 15. The ban period is imposed to avoid the disturbance caused to marine life affected by trawl fishing during the fish breeding season and avoid juvenile catches. To use this ban period our fishing vessels get time to prepare to involve the repair and maintenance for every year. Every steel body fishing boat warrants an expenditure of ₹2 lakh on painting alone. A large boat would require an expenditure of ₹6 lakh to ₹10 lakh for major overhauling works, including engine repair works and a medium boat ₹3 lakh to ₹4 lakh. The works on small boats would involve an expenditure of ₹1 lakh to ₹2 lakh. This expenditure must be spent money to get better expectancy of our fishing boats.

INTRODUCTION

The Nagapattinam district has the 2nd longest coastal length of 187.9 Km in next to Ramanathapuram district of the Tamil Nadu. A total of 339 non-motorized crafts, 5,636 motorized crafts, 875 mechanical fishing crafts are involved in coastal fishing besides 200 deep sea mechanized gill netters involved in the deep sea fishing. Among the 1075 mechanized fishing vessels, most of them steel body fishing vessels. The proper vessel maintenance is so important your lives depend on it. The properly scheduled maintenance of engine room, hull portion, on-board equipments will helps to increase the life expectancy of your vessel during the fishing operation. The operation of mechanised fishing vessels in the coast, it is an rough sea environment, factors of tidal influence and bad weather impact need to be protected fishing vessels against the marine corrosion, borers, foulers and fungal deterioration. The main concerns of this issue taken care of steel vessels are technically and economically viable used to maintain in good condition. So every year needs to boats in proper maintenance to get better life expectancy. This article will give details of repair and maintenance cost analysis of steel vessels. Most of the boat owners had to spend more investment for particularly painting work of the steel body fishing vessels.

The main goals of periodic inspections and maintenance is to identify and the fix the issues in dry dock.

- Repair of the damaged hull portion, replacement of corroded parts, flattening of dents
- Technical service of marine diesel engines
- Repairs of the propeller-rudder complex, replacement of damaged or worn- out parts
- Maintenance of pipelines on a vessel
- Reconstruction of technical premises of a fishing vessel (fish holds, kitchen) as well as the one of accommodation spaces
- Maintenance of rigging.



1. Scrapping work



2. Painting work

3. Welding work

Various expenses incurred in steel fishing vessels

The following cost is usually made this carried out the repair and maintenance of steel vessels

- Lifting the fishing vessels from the sea is nearly 60 feet size is about Rs.30,000/- and 65 feet size is about Rs.35,000/- using the cranes to lift the vessel.
- For scrapping the fishing vessel, 2 labours are involved to scrap the vessel parts for 10 days at the labour cost of scrapping work is Rs.1,000/person. Normally, scrapping a hull portion it will take 6 to 10 days and larger fishing vessel will takes 1 month (quick rust portion and plate damaged).
- Propeller dismantled, aligned, serviced and refitted. Propeller normally removing the vessel is labour cost about Rs.400 to 500/person. Usually sent the propeller for repairing work to Rameshwaram workshop. First of all clean the barnacles and 6 labour to involve reshaping and seasoning 200 kg is size of propeller servicing charge about Rs.600/kg. The repair cost of Rs.1,20,000/propeller.
- Inner deck area coated with painting and fish oil application is necessary to make. Fresh fibre coating is applied and the cost it will take nearly Rs.10,000-15,000/.
- Grinding the parts labour cost is Rs.8,000/vessel, batch angle stating work is carried out it will comes life for 5 years, colloy type will better life of deck portion.
- Antifouling painting application cost charges is Rs.40,000/vessel. Normally preferred Shalimar International and Nerolac brands.
- Draft portion needed for each steel vessel is 10 12 ltr of anti fouling paint used. One litre of anti fouling cost is Rs.950- 1200/-.Cost of antifouling for steel vessel is Rs. 15,000/.
- The total repair and maintenance cost of steel vessel 60 feet size is Rs.2,50,000 to 3,00,000/year, 65 feet size is Rs.2,75,000-3,25,000/year.

CONCLUSION

Draft portion could be removed only during repair and maintenance. If they were not removed, the weight of the vessel would increase, leads to additional diesel consumption. Due to this expenditure will be increased. Large size of vessel need at least 6-10 days for the work and small boats three days. It is very important to every year have to maintain vessels during the fishing ban period. This is for every year should spend money for repairing work. Comparative deck portion to hull portion needed to should maintain in such a right manner. Otherwise turn to reflect on the returns. All life saving appliances of IRS approved standards specified by MMD are available on board.

REFERENCES

- Sathiadhas, R. and Panikkar, K.K.P. 1989. Costs and earnings of trawlers operating at harbour (Tamil Nadu). Marine Fisheries Information Service, Technical and Extension Series 100, 1-8.
- Sathiadhas, R., Panikkar, K.K.P. and Kanakkan, A. 1992. Costs and earnings of trawl operations along Nagapattinam coast of Tamil Nadu. Marine Fisheries Information Services, 118: 4-11.
- Senthilathiban, R., Venkataramanujam, K., Selvaraj, P. and Sanjeeviraj, G. 1996. Determinants of costs and profit in mechanized fishing in Tuticorin fishing harbour, Tamil Nadu. Journal of Fisheries Economics and Development, 3: 1-9. [15].
- Senthilathiban, R., Venkataramanujam, K., Selvaraj, P. and Sanjeeviraj, G. 1997. Costs and trawlers operating at Tuticorin, Tamil Nadu. *Fish. Technol.*, 34 (2): 31-34.