

Hand Lift net (*Kattukambu valai*) used in Inland Water Areas of Cauvery Delta Districts of Tamil Nadu

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SUMMARY

Nagapattinam and Thiruvarur districts have potential inland water resources for catching fishes using traditional type of fishing gears. A fisherman using this gear daily generating income was nearly Rs.500-1000/- and also fishermen spending few hours to catching the fishes per day. The peak fishing season was during the months during the period from June to December. Major species caught by this net was recorded such as Tilapia followed by Carps, Mulletts, Milk fishes and Shrimps. Further, after rainy season they move to brackish water areas to operate for remaining months. Brackish water creek side used to catching of shrimps likely Indian white shrimp (*Peneaus Indicus*) and black tiger (*Peneaus Monodon*) were found major varieties and also catching of carangids.

INTRODUCTION

The hand lift net (*Kattukambu valai*) is one of the type of Chinese dip net model. This net is operated along the river banks of small water canals, creeks and village storage tanks of Nagapattinam and Thanjavur districts. The districts have perennial inland water areas nearly more than 4,300 and 7,525 fishermen involved in inland fishing. However, 2,800 fishermen were involved *kattukambu valai* fishing practices in the inland water areas of these districts. The inland fish production of Nagapattinam district was 2,000 tons. The major water resources for this area Cauvery and its tributaries. These two districts apart from agricultural activity they may have also involved using *kattukambu valai* generating alternate income for their livelihood. Thirumanangudi, Kachanam, Karapidagai, Kadathathi villages on Nagapattinam district were found actively engaged during the rainy season months of June to December using this net to generate the income. Further, Thiruthuraipoondi, Mannarkudi, Pamini, Thillailvilagam, Muthupettai villages of Thiruvarur district were found engaged rainy season time using this net to catch the fishes. However, rainy time they may have continue fishing using this net move to bigger creek it is connected to the sea is where ever possible villages. In Nagapattinam district Karapidagai river using this net to catch the brackish water fishes also. These types of lift nets, which can be relatively small, are usually operated from simple installations. Lift nets consist of a horizontal netting panel framed by only wood or a bag shaped like a parallelepiped, cone with the opening facing towards upwards. After being submerged at the required depth, the nets are lifted or hauled out of the water by hand. The normally depth of operation of this gear is 7-10 ft.

Hand lift net (*Kattukambu valai*)

The hand lift net used in the Nagapattinam and Thanjavur districts is locally known as *Kattukambu valai* (Fig1.1). The Kattu means join together, kambu means poles that is joined together the poles. *Kattukambu valai* is simply can make it individual. There is no technical specification. Normally in this type of gear four or five wooden poles are tied together with long rope attached for handling the gear for easy shooting and hauling the net and middle of the gear tied to four corners of the poles attached the polyamide nylon material meshed structure type. Out stretched net suspended over the canals and other end is hold with the hand operated easy to shoot and hauling individually for every operation of the net. Mesh size of the gear 15 mm. This type of net meshes size used possible to catch juveniles also. So try to increase the mesh size to avoid the catch of juveniles size of fishes. While using bigger mesh size it would be better size of catches. The cost of making of individual net is around Rs. 1,500- 1,700/-. The length and breadth of meshed structure is 5 ft. The soaking time of net was nearly 15-25 minutes for every operation.

Species catch composition

Species caught using this gear is Tilapia followed by Shrimps, Mullet fish, Carp varieties. The season of this gear mainly operated during the rainy time months of June to December. The major month of catches were found June to December for every year. These six months those fishing villages fishermen as well farmers

are engaged using this gear to generate alternate income for their livelihood. Species caught 50% of contributed Tilapia, 20% of shrimp, 20% of mullet fish and 10 % of carp varieties.

Table1. Species catch details

Sr. No.	Species	Average mean catch (in kgs)	Catching size
1.	Tilapia	3-5 kg	100 gm to 1.5 kg
2.	Shrimp	2-3 kg	15 -20 gm
3.	Mullet	4.0 kg	500 gm
4.	Carps	3.0 kg	250- 750 gm
5.	Milk fish	3.0 kg	350- 500 gm



Fig.1. Operation of hand lift net

CONCLUSION

Both districts fishermen were engaged this type of traditional fishing methods. Using of this type of gear through generating the alternate income for their livelihood during the winter months. To increase the mesh size even gets better size of catches and also avoids the catch of smaller size young ones. Further, focus on the brackish water creek side area fishing and to improve the gear design and permanent structure like Chinese dip nets used in Kerala backwaters. Marketing of fishes is very easy to selling while gear operating area itself.

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