

Global warming, decline in the population of predatory fish species due to overfishing and eutrophication are said to be the factors causing the proliferation of jellyfishes. During premonsoon months, increase in temperature along with salinity rise, causes influx of jellyfish from the seas into in the estuarine and backwaters areas. These jellyfish choke the stake nets and even causes damages to other nets like Chinese dipnets and seine nets. The possible interventions may be excluder devices at the mouth or cod end of stake nets to segregate jellyfish (Manojkumar *et al.*, 2015) or converting the jellyfish to some valuable products which will be an additional income to the stake net fishers.

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Crab Ring Trap: A commercial fishing activity and a source of livelihood in Mahul, Maharashtra

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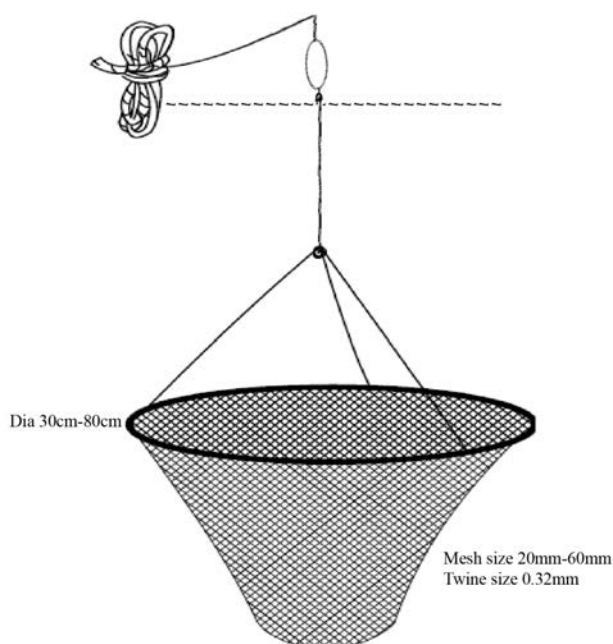
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Traps are passive fishing gears designed in such a way that the fish enters freely into the trap, and get trapped. Traps are selective, low energy and environment friendly fishing gear. Different types of indigenous fish traps and pots are operated along the coastal waters of India. Most of the traditional traps are made of bamboo and related materials with short life. Currently many modified traps with different shape, size and

design are available in the local markets. Most of the fishermen in India consider trap fishing as an option for secondary livelihood, besides the major fishing operations.

Mahul fishing jetty in Mahul village is one of the major fishing centres in Mumbai, which is densely covered with mangroves. It is an intertidal undulated area, where crab fishing using ring

traps is a commercial activity. Crab ring traps are locally known as *Fug/pug*. The design of the trap is simple with a bag of mesh/webbing with polyamide/polyethylene monofilament/multifilament on a circular metal ring made of steel plate/iron rod attached by a bridle to a pulling cord. The metallic ring is 30- 80 cm in diameter with a webbing (0.32 mm) of mesh size of 20-60 mm. Floats made of thermocole are attached with ring having dimension ranging from 8x4x2 - 15x13x6 cm. The traps are operated in the creek mouth within a kilometer from the jetty and peak season for the operation of these traps are during the post monsoon period. Each fisherman carries 80- 100 traps and the average traps used per trip is 30-45 in number. Average soaking time for these traps is 30-60 minutes. The targeted crab species are *Scylla serrata* and *Portunus pelagicus*. Average size of the crab ranging from 300-1800 g, which fetches Rs. 800-1200/dozen in the local market for live crab (catch per trip 25-30 number) with an average earning of around Rs.1600-2400/trip. If juvenile crabs are trapped, the fishers' generally releases it back to the water because of its low price. Fish waste and poultry waste are used as bait which is attached at the centre of these traps.



Non motorized wooden fishing vessel of 4.6 - 5.0 m size are used for operation with one or two crew members.

Since the design of the crab ring trap is simple, the fabrication costs is around Rs. 200-300/. Life span of a trap is 4-5 years. Fishermen usually fabricates the crab rings by using the webbings from abandoned nets (mostly gillnet), which reduces the chance of ghost fishing.

Crab fishing in Mahul is a primary livelihood activity during the lean season. Coastal fishers can be encouraged for trap fishing in the context of resource conservation and energy saving. These traps are selective, cheaper, eco-friendly and easy to fabricate and has the potential for sustainable exploitation of fishery resources and it can be adopted by fishers of similar ecological niches.

