

Essential dos and don'ts in artificial reefs

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The successful implementation of the AR in coastal waters, fisheries management and utilization depend on the following factors -

1. Proper site selection and stakeholders' agreements.
2. Well-built modules with good strength and durability.
3. Stakeholders' participation and responsibility sharing and ownership attitude.
4. Frequent maintenance shutdowns and visits and discussions between the leaders and the ARSC members.
5. Frequent additions and extensions to the reef area and expansion as the need arise, after sufficient review.

The essential activities to be followed strictly are (Dos)

- a. Reporting and maintenance of daily fishing log entries on catches and revenue.
- b. Following the weather and fishery forecasts from the responsible agencies.
- c. Maintaining and regularly updating a chart of fishing periodicity and calendar relevant to the grounds and AR sites.
- d. Sharing the coordinates of AR with all the fishers of the hamlet and the adjacent fishing villages.
- e. The naming of the AR sites - this makes it convenient for memorizing, comparisons, and data recording.
- f. Informing other fisher members and the ARSC members of the developments over the AR sites and issues.
- g. Bringing to the notice of the ARSC, any uneventful or accidental stranding of nets or damages to the reef structures.
- h. Expansion of the AR reef area and supplementation every third year since installation, partnering with any agency or from within.
- i. Recording rare collections or observations/sitings and spawnings and aggregations of recruits and their seasons.
- j. Observing a vacation for reef fishing or intervals of non-fishing over these areas.
- k. Promoting the use of hooks and lines and surface jigs, and the live bait collection.
- l. Promoting SCUBA enthusiasts among the fisher communities and making them guardians of the reef and promoting scope for eco-tourism.
- m. Promoting more affiliations and ownership attitude towards the resources and habitats.

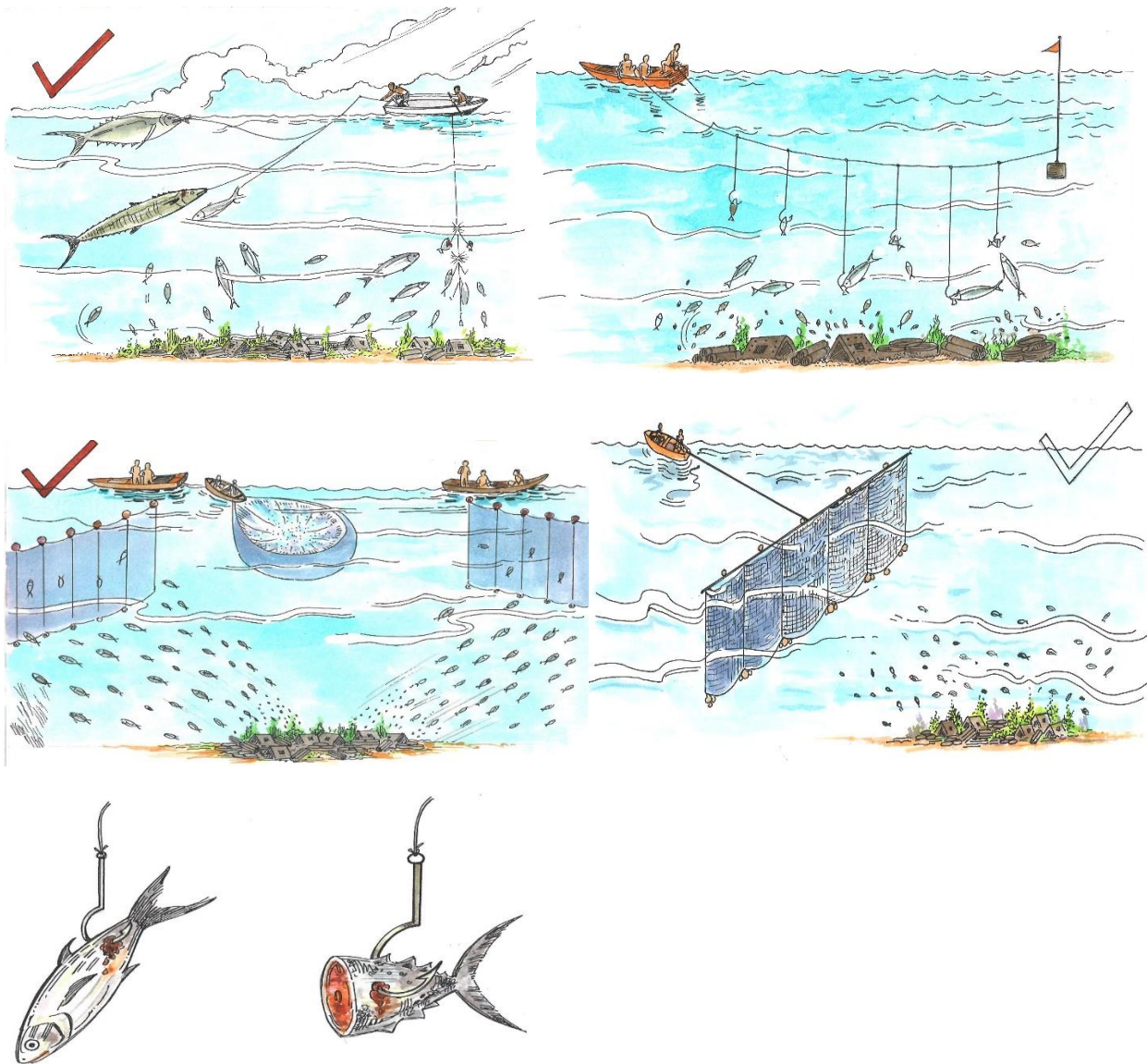


Fig.67. The best gears to be operated over artificial reefs are hooks & lines, baited lines and troll lines, drift gill nets (surface gill nets) and small bag nets. depending on the direction of currents and depth of operations. The reliance on the dead fish and meat is reduced by the availability of fresh live bait from the reef systems.

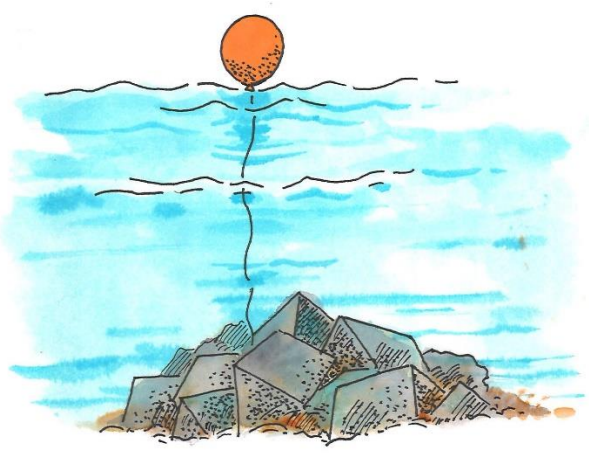
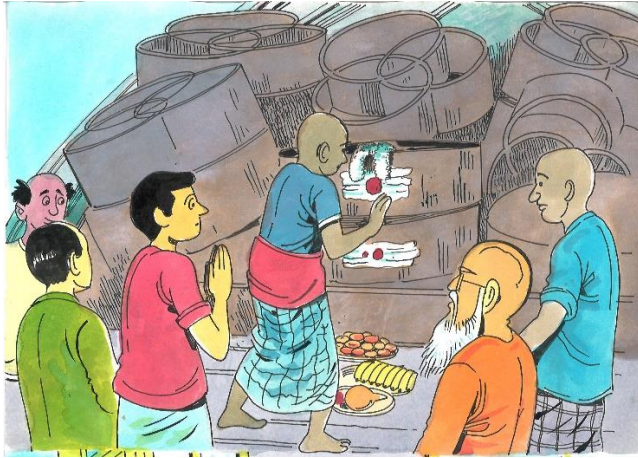


Fig.68. Worshipping the reef structures and naming/markng the sites have been noticed regularly, indicating the importance of the restoration of fish habitats in their livelihoods.



Fig.69. Regular upkeep of an AR site.

- n. Developing project-based programs at fisher levels - inviting CSR-supported funds in promoting breeder/spawn/seed ranching programs, ghost net clean-ups, eco-tourism, and restoration programs.
- o. Developing more coastal clean-up awareness programmes and sustainability camps.
- p. Penalising the defaulters and devising a system to bring them to books.
- q. Recording any untoward incident and deliberate, intentional or accidental, operation of illegal or unapproved gear over the AR area in the log book and the registers maintained

by the ARSC committee, which can then be presented to the fisher leaders and further, with their consent, can be referred to the Department officials for action.

- r. Rewarding the best operating fisher and village on a biannual basis for the perfect upkeep and management of reef fisheries in an area.

The activities are which strictly to be avoided (Don'ts)

1. Do not allow any discarded vehicles and matter to be dumped as AR.
2. Do not use any bottom-set gears - gill nets, trammels nets, trawl nets, dredges, bottom seines and explosives in the AR.
3. Do not allow bottom trawlers to operate in the stipulated artisanal fishing limits in the vicinity of AR areas.
4. Discontinue the use of the above nets in this area and gradually decrease the harmful gear numbers in the fishing areas.



Fig.70. The practice of discarding or dumping unwanted and scrap items on the sea bed is against conventions and it should be avoided.

5. Do not discard any old or torn nets over reef areas.
6. Do not use lights and attract the reef fishes to gather the stock for fishing as this can lead to overexploitation.
7. Do not operate nets for the target species when they are juveniles and recruits.



Fig.71. Bottom dragging gears and efforts should be completely avoided over an AR site.

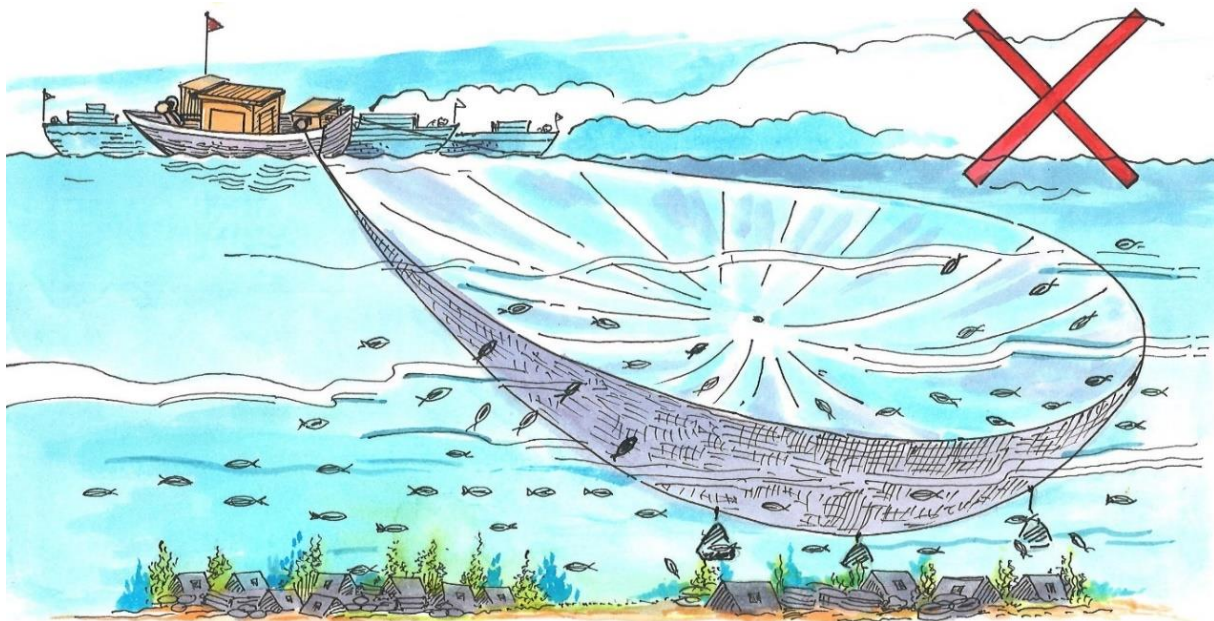


Fig.72. Large bag nets and seines with more bottom draft and drag should be avoided over AR sites.

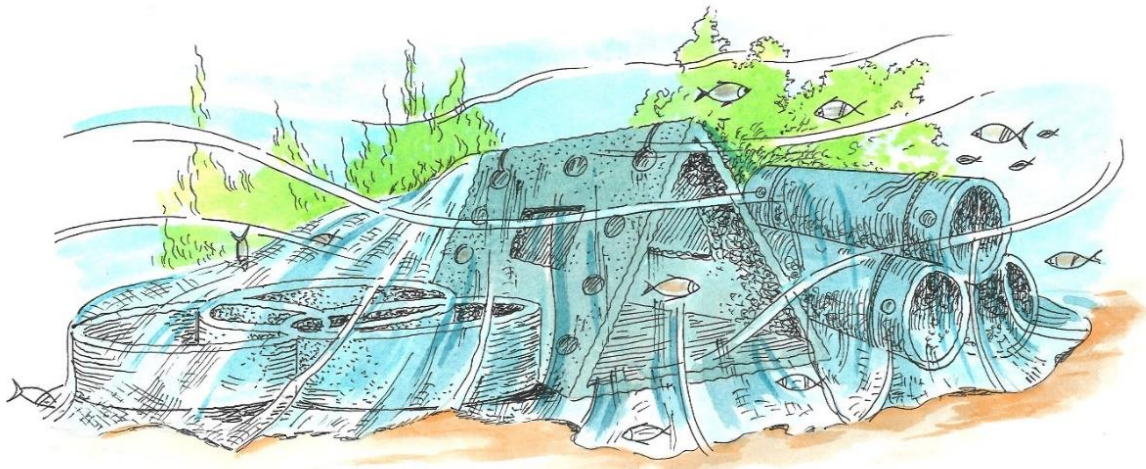


Fig.73. The bottom set gillnets, trammel nets and trap nets and drift gill nets are very detrimental to the AR reef life and shall create ghost fishing and spoil the environment.

8. Do not deliberately capture broodstock.
9. Do not let the ghost nets permanently disfigure and damage the reef faunal assembly.
10. Do not drag the reef area with anchors and heavy objects.
11. Do not let offenders continue the violation; that will lead to failure of faith in the management and governance.
12. Do not suppress the opinions and suggestions kept by reef fishers even when they are a minority.
13. Do not set up reefs in very shallow waters and nearshore areas.
14. Do not set up reefs in conflict zones or vulnerable zones.
15. Do not set up reefs in seagrass beds or coral reef areas, MPAs, sanctuaries (except when reefs are meant for conservation) and near industrial installations.