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OBJECTIVES BACKGROUND

Trawling is destructive as it catches a large volume of non-target bycatch^[1]. Traditionally discarded, bycatch is increasingly being sold as 'trash fish'.

- Assessing the quantities and composition of trash fish
- Understanding trends of trash fish with fishing gear and effort

Long-term goal: Understanding the ecological and economic impacts of trash fishing.



This is a mix of species of low commercial value owing to their quality or size. It is sold for various uses like chicken and aquaculture feed^[2], demand for which is increasing^[3].

> While trash fishing has many benefits, it can impact marine ecosystems and socio-economics of fishermen^[3,4]. However, little monitoring and regulation is done.





1 trawler sample/day 3 sampling days/ week January – May 2018 Total sample size n = 58



1kg randomly sampled from crates Species identified, measured (TL and weight)

Additional data

Fishing effort, gear, depth and location recorded



RESULTS AND DISCUSSION

Quantity and Composition of Trash

Benthic vs Pelagic Trawlers

X

X

p = 0.36

Relationship of quantity of trash fish and proportion of juveniles with different fishing variables

VARIABLE	QUANTITY	PROPORTION OF
	OFTRASH	JUVENILES

• 23.6% (by weight) of a



- trawler's landed catch is trash fish.
- 115 species found in the trash, 99 of these are commercially consumed.
- 78.9% of trash fish (by count) is composed of juvenile individuals.
- Capture of juveniles may compromise recruitment of the species, which can lead to population declines ^[3], and reduce economic returns from fisheries in the long run [5]

Trash fish showed no variations with depth or fishing location, but its quantity varied significantly between benthic and pelagic trawlers

Pelagic trawlers are poorly studied in India with respect to bycatch. Higher quantities of trash fish in them call for further research on its impacts.

CONCLUSION

livelihood impacts for fisher communities dependent on these species

this needs further research.

> Understanding ecological trends and socio-economic drivers of trash fishing for better management of trawl fisheries.

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ACKNOWLEDGEMENTS

I thank Kartik Shanker and Naveen Namboothri for their guidance for this work, Kabini and Manini for creative assistance, and Noun Project for the icons.



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