

## Beyond TEDs: The TED Controversy from the Perspective of Orissa's Trawling Industry

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In 1989, the USA attempted to regulate turtle bycatch by requiring imported shrimp to be caught with the use of turtle-friendly fishing gear such as TEDs (turtle excluder devices). Though the Government of India—along with Pakistan, Thailand and Malaysia—lodged a protest with the World Trade Organisation (WTO),<sup>1</sup> arguing unfair trade restrictions, they were forced to consider the implementation of TEDs (Bache 2001). Since then, various agencies of the Indian government have taken steps towards the introduction of TEDs on the Indian coast (Choudhury 2003). Several workshops have been conducted in Orissa, and recently, the Marine Products Exports Development Authority (MPEDA) has distributed free indigenous TEDs (developed by the Central Institute of Fisheries Technology, CIFT) along the east coast of India (Bavani Sankar and Ananth Raju 2003, Choudhury 2003).

Though a sizeable section of Orissa's trawler-owners (540 out of nearly 1,100) formally accepted TEDs in April–May 2002 from the fisheries department of Orissa, to install in their trawl nets (A C Nayak, deputy director, Fisheries: Marine, Govt of Orissa. pers. comm.), they are neither convinced of its efficacy and nor are they willing to use it. The question therefore remains, how can turtle mortality be reduced, with or without TEDs? And what measures are acceptable to trawler-owners?

### FIRST WORKSHOP-CUM-DEMONSTRATION ON TEDS, 1996

As a first step towards the implementation of TEDs in India, the NMFS (National Marine Fisheries Service), USA conducted a workshop on construction, installation,

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<sup>1</sup> See Chapter 25 for a report of the shrimp–turtle dispute.

operation and management of TEDs along with an on-sea demonstration of its performance, to a select group of managers and crew of the trawling industry, from 11–14 November 1996. This was held in collaboration with the fisheries department, Orissa and Project Swarajya. Though the trawler leaders welcomed the initiative of the government in organising an interface with them on the new technology, they expressed their deep apprehensions about its feasibility at the local level due to the loss of fish catch (for details see Anon. 1996).

#### THE INTERIM YEARS

Having heard a PIL, the High Court of Orissa delivered a judgement on 14 May 1998, which observed in conclusion, Para 21: 'All trawlers operating in the area should be required to use devices like Turtle Extrusion [sic] Device (TED) to avoid entanglement of sea turtles. Poaching or netting of sea turtles should be seriously dealt with. The coast guard operating system should be strengthened to prevent poaching and netting the sea turtles', and Para 28: 'Let the state and central government take necessary steps to see that the aforesaid directions are implemented forthwith. With the hope that the olive ridley and the young fisher boy eking out his living by catching fish smile at and not run away from each other, we part with the case'.

The spirit of the High Court judgement—which called for a holistic approach, with the interests of both turtles and fisher folk in mind—was not adhered to by the executing agencies. But for a few small efforts, like field-trials of the slightly modified Georgia Jumper model of TED in Paradeep and Gahirmatha in 1998, the indigenisation of TED technology along the Orissa coast did not involve trawler-owners, the prime stakeholders in the turtle–trawler conflict.

In 1997, following the notification of Gahirmatha Marine National Park, the coast guard and Orissa forest department began to apprehend trawlers who entered the protected area. Further, the Orissa fisheries department brought out a notification dated 17.4.2001 to amend the Orissa Marine Fishing Regulation Rules, 1983. The amendment disallowed operation of any mechanised fishing vessel without a TED. During this period, 15,000–20,000 turtles died each year, and many trawlers were apprehended and cases booked against them (Shanker and Mohanty 1999, B Mohanty pers. comm.), leading to an escalation of the conflict between turtle conservationists and the forest department on one hand, and the trawler-owners on the other (Choudhury 2003).

#### SECOND WORKSHOP-CUM-DEMONSTRATION ON TEDS, 2002

In order to bring various stakeholders together, a workshop-cum-demonstration on turtle excluder devices was held from 9–12 February 2002 at Paradeep, by the fisheries department, Orissa and Project Swarajya. The workshop was attended by delegates from the Central Marine Fisheries Research Institute (CMFRI), Central Institute of Fisheries Technology (CIFT), Fisheries Survey of India (FSI), Wildlife Institute of India (WII), and fisheries and wildlife officials from the central and state governments. Participants also included a large number of delegates from various trawler associations working along the Orissa coast (for details see Anon. 2002).



## Perspective of the Trawling Community

During the course of the workshop, trawler-owners and other fishers (mainly gill netters) expressed their dissatisfaction with turtle conservation measures in general, and TEDs in particular (Anon. 2002). Their protest was manifested in the form of shouting and demonstrations, both inside and outside the venue. The trawler-owners complained about:

- \* the absence of demarcation in the sea between fishing and non-fishing zones,
- \* the treatment meted out to them by personnel from the coast guard and the state forest department,
- \* increasing, multiple tax burdens in the form of Central and State Sales Tax, Income Tax, Excise Tax, Octroi Tax, etc,
- \* the price of raw materials, declining catch,
- \* the lack of proper international or local markets, and
- \* the denial of diesel subsidies by the state government.

The trawler-owners expressed resentment at the fact that they alone were targeted for the death of turtles (Anon. 2002). They stated that they were not opposed to turtles or their conservation, offering to close their trawling industry during the turtle nesting season in return for suitable compensation, and also offering to help with turtle conservation provided they were given training. The trawler-owners also demanded that if they used TEDs, non-fishing zones would have to be declared ineffective. They were unanimous in their opinion that there were several factors responsible for turtle mortality along the Orissa coast, such as change in the natural configuration of the nesting beach, lighting from Wheeler Island, mass destruction of eggs by soil erosion and inundation, predation by carnivorous land animals, environmental pollution, and so on. They argued that the government had targeted only trawler-owners, as if they were solely responsible for the turtle deaths. They also believe that this biased approach not only failed to check growing turtle mortality, but also hurt the sentiments of trawler-owners and alienated them completely from turtle conservation programmes.

### MEMORANDUM BY TRAWLER-OWNERS

To further reinforce their definite position on various issues, the All Orissa Trawler-Owners' Coordination Committee circulated a Nine Point Memorandum on the last day of the workshop, which articulated their grievances about the poor state of the trawling industry and also their positions on TED- and turtle-related issues. They argued that while sea turtles congregate within shallow waters (only 3–4 km off the coastline), and in a particular period of the year (2–3 months only, during the mating and nesting seasons), an extensive area up to 20 km off the coastline had been reserved as a 'no fishing zone'. They stated that there were many biotic and abiotic factors responsible for large-scale turtle mortality, and the trawler industry and fishing communities shouldn't exclusively be held accountable. They also felt that if the CIFT-TEDs were used, it would result in the escape of fish catch by 50 per cent. The Memorandum called upon the CIFT to work out an alternative device in place of the TED, which would cause no loss at all in the fish catch while safeguarding turtles at the same time,

and that the alternative device be field-tested at least for a year and its viability established before the trawling industry was asked to use it. They further assured that they were willing to completely close down the trawl industry for the entire period of the turtle season, provided they were compensated for the loss incurred. The Memorandum concluded, 'In recognition of the spirit of self-sacrifice so shown by the trawling industry, and also in the interest of furthering the economic development of the fishing communities, necessary financial assistance should be provided to them on one hand, and their involvement in the turtle conservation measures elicited on the other'.

#### THE TRAWLING INDUSTRY'S CRITIQUE OF THE CIFT-TED

The trawler-owners of Orissa said that they were sentimentally averse to the idea of cutting a hole at the throat of their net in order to attach the grid-like metal structure that makes up the TED. The TED is seen as an alien device, superimposed on them by the Government of India which in turn faces the threat of the US government's trade embargo. They believe that, while the device might work well for exclusive shrimp trawling which is in vogue in the USA and other developed countries, it may not be as useful in India where mixed catch is harvested.

Initially, during the NMFS workshop in 1996, the Georgia Jumper model of TED (which has 7 bars) was demonstrated. The general opinion of trawler owners was that the space between the bars was too narrow, and even middle-sized fish would escape through the exit hole. For a brief period in 1998, the forest department experimented with a slightly modified model of the Georgia Jumper TED, called TSD (turtle saver device), which had 6 bars in place of 7, to allow middle-sized and large-sized fishes to pass through into the cod end of the trawl net. The trawler-owners were not satisfied with the TSD either. Most recently, the CIFT-TED has a reduced number of 5 bars. However, following the on-sea demonstration of CIFT-TED on 11 February 2002 off the Paradeep coast, the trawler-owners unanimously rejected TEDs entirely.

During the on-sea demonstration of TED, an extra cod end was attached to the exit hole of the trawl net so as to ascertain the nature and amount of catch loss, including turtles and fish. The two vessels which had an extra cod end showed a loss in catch of up to 3.85 per cent and 14.83 per cent respectively. However, the trawler-owners believed that the cod end had been installed to deceive them, and that the loss owing to TED, was actually 50–60 per cent.

It is therefore evident that regardless of the number of bars or placement angle of the TED, trawler-owners are mentally resistant to its use, though they continue to show formal compliance on paper—complying with the amended OMFRA (Orissa Marine Fisheries Regulation Act) rules or having officially accepted TEDs from the government under pressure. They state that the government has to first conduct field-tests of any new design of TED for one complete year before they will consider using it.

#### TED DISTRIBUTION

Despite assurances from the Fisheries Secretary, Government of Orissa, that it would not impose the TED on trawler-owners against their will, the Department of Fisheries, Orissa has been pressurising trawler-owners to accept the TED. They have formally



distributed 540 CIFT-TEDs to trawler-owners along the Orissa coast—in Paradeep (Kujang) 310, Astarang (Puri) 70, Dhamra (Balasore) 160—between April–May 2002. The acceptance by trawler-owners is merely a facade. The trawler-owners of Orissa are businesspeople and do not want to enter into any confrontation or litigation with the government, lest their other interests—such as issue and renewal of fishing license, accident relief, diesel subsidy, disposal of pending cases—are jeopardised, which explains their acquiescence in the well-orchestrated drama of TED distribution by the fisheries department. There is no evidence of installation or use of TEDs in any trawl net.

#### TRAWL GUARDS

The trawl guard is a completely indigenous device invented by local fisher folk who claim that it has the merits of the TED without its controversial features. Essentially, it is fitted to the mouth of a trawl net, to guard against the accidental entry of unwanted objects, living or non-living. The trawl guard is a completely collapsible cover made of 4-kg nylon ropes and placed externally at the mouth of the net. It is a maze of big, square holes, through which all conventional big fishes can enter, while larger objects like turtles, would be obstructed at point of entry. The size of the holes can be increased or decreased depending upon the size and species of fish a trawler seeks to catch.

Though yet to be recognised in scientific circles, the device has been in use since the supercyclone of October 1999 on the Orissa coast. Local fisher folk used this device to cover the mouth of their trawl nets to avert damage caused by large logs of wood, which had been washed to sea during the cyclone. The fisher folk further found that this device not only safeguarded the trawl from logs of wood, but also from the accidental entry of bycatch like turtles and sharks.

### Conclusion

The TED controversy in Orissa has led to questions about the manner in which the TED programme, and its entire range of allied legislations and policies of the government in the marine fisheries sector, has been designed and implemented. It has worked in a top-down style over the years, with complete disregard for the users of the marine resources. This has resulted in severe disenchantment among the fishing communities towards fisheries administration as a whole. While the principle that ‘users should be the managers of a common property resource’ has gained some currency, it has not been adopted in India, especially in the fisheries sector. The following are a few salient components of a strategy to cater to the needs of fishers as well as to conserve turtles.

- \* New fisher-friendly schemes need to be introduced and existing ones implemented properly with fisher folk being involved in the administration of the schemes.
- \* The existing laws, rules and regulations concerning marine fisheries need to be reviewed with the corresponding streamlining of the fisheries administration.
- \* One single department of the government needs to deal with all categories of fisher folk and all fishery-related issues.
- \* Fisher organisations need be entrusted with the job of formulating appropriate turtle conservation measures and designing devices with the help of concerned government agencies acting as their collaborators.

- \* Indigenous devices like the trawl guard need be subjected to extensive experimentation and research to develop a foolproof device that will exclude turtles and other endangered species, yet retain fish catch.
- \* The top-down approach that characterises the present structure of the fisheries administration needs be radically recast.
- \* Appropriate strategies need to be evolved to protect fishing communities, other than trawlers and other mechanised and motorised fishers, and to prevent overfishing of resources, so that fisheries can remain a source of sustainable livelihood in Orissa.

### **Literature Cited**

Anonymous. 1996. *Workshop-cum-demonstration on TED at Paradeep during 11–14 November 1996: A report*. Department of Fisheries, Government of Orissa and Project Swarajya, Orissa.

Anonymous. 2002. *Workshop-cum-demonstration on TED at Paradeep during 9–12 February, 2002: A report*. Department of Fisheries, Government of Orissa and Project Swarajya, Orissa.

Bache, S J. 2001. India and marine turtles at the WTO. *Kachhapa* 5: 4–8.

Bavani Sankar, O, and M Ananth Raju. 2003. Implementation of turtle excluder device in Andhra Pradesh. *Kachhapa* 8: 2–5.

Choudhury, B C. 2003. TEDs in India: From conflict to consultation. *Kachhapa* 8: 1–2.

Shanker, K, and B Mohanty. 1999. Operation Kachhapa : In search of a solution for the olive ridley of Orissa (Guest Editorial) *Marine Turtle Newsl.* 86: 1–3