

# Z-drive innovator wins top award

## Innovation Helps Fishing Boats Land On Beaches

TIMES NEWS NETWORK

**Ahmedabad:** B Mohanlal, 56, from Allepey in Kerala, has developed a Z-drive propeller and reversible reduction gear for marine diesel engines, for use on fishing boats.



**Mohanlal**, an accomplished boat mechanic with three decades of

experience in repairing marine engines, observed the inconvenience fishermen faced with an inbuilt gearbox on boats using diesel engines or petrol-start kerosene-run engines. The boats with diesel engines had a long tail propeller system without a gearbox, which affected maneuverability. A beach landing is very difficult using the conventional inboard marine diesel engines. Moreover, kerosene-run engines consume more fuel and pollute the water affecting marine life adversely.

After rigorous research and development, Mohanlal developed a gearbox and

manually tiltable Z-drive system for small capacity diesel engines to overcome these problems.

The tiltable Z-drive saves fishing nets laid by fishermen helping to make smooth landings even in shallow waters. Sea weeds or other entangled objects can be removed from the propeller by a person on the



(Above) Reversible reduction gear  
(Below) The tiltable z-drive



craft, by simply tilting the Z-Drive to horizontal.

Matsyafed, the Kerala State Co-operative Federation for Fisheries Development Ltd, which recommended the innovation, mentions that the in-board versions of crafts with Z-drive system can successfully be introduced and popularized in the traditional fishing sector. The innovations of Mohanlal, apart from easing maneuverability, reduce running costs and minimize pollution.

This innovator, who was awarded in 2009 by the National Innovation Foundation, has won the Indian Merchants' Chamber Inclusive

Innovation Awards 2013 announced on November 14 at IMC, Mumbai. The award is in the form of financial support of Rs 20 lakh for his innovations.

The aim of IMC Inclusive Innovation Awards is to recognize product or service innovations, which are inclusive, capable of commercial exploitation, sustainable and scalable.

**INDIA INNOVATES**

