

# Impact of Cyclone Vardha on fishers and their livelihoods

R. Geetha, E. M. Chhandaprajnadarsini and P. Laxmilatha

*Madras Research Centre of ICAR-Central Marine Fisheries Research Institute, Chennai*

*e-mail: geethaeconomist99@gmail.com*

The Vardah Cyclone struck Chennai, Kanchipuram and Thiruvallur coastal districts of Tamil Nadu on 12<sup>th</sup> December 2016 and impacted nearly 25000

fisher families. Wind speed of 140 km/hour and tidal waves inundated the low lying areas of coastal villages causing very heavy damage. In badly hit

Table 1. Estimation of economic loss due to loss in fishing days

District	Mechanised			Motorised		
	Number of crafts	Loss in Fishing days	Economic loss (₹ Crores)	Number of crafts	Loss in Fishing days	Economic loss (₹ Crores)
Chennai	832	4	8.32	1185	7	1.08
Kanchipuram	-	-	-	1985	5	1.49
Thiruvallur	-	-	-	1211	12	2.47
<b>Total</b>			<b>8.32</b>			<b>5.04</b>

mechanised and motorised fishing boats, gears, engines and catamarans in coastal villages and landing centres. Majority of them could not go for fishing and allied activities which resulted in loss of their regular daily income. Thousands of fishing boats were damaged beyond repair in several coastal villages. With this backdrop, the loss in fishing days, damage to property, crafts, gears and household appliances were estimated based on report developed by Department of Fisheries, Tamil Nadu. Average fishing income per day was estimated based on cost and earnings data routinely collected from the fish landing centres by Socio-economic Evaluation & Technology Transfer (SETT) Division of ICAR- CMFRI. Economic loss was calculated by estimating number of loss in fishing days and average fishing income per day.

In Chennai 21 mechanised boats were wrecked and 807 mechanised boats were partially damaged. 191 motorised boats were damaged. Total physical loss was worked out based on data provided by Fisheries Department, Tamil Nadu and estimated to be ₹ 6.57 crores. (Fig. 1) Economic loss was estimated to be ₹ 9.4 crores (Table 1). Nearly 1243 FRP boats and 728 catamarans were partially damaged in Thiruvallur district. Damage value was assessed as ₹ 9.6 crores and economic loss as ₹ 2.5 crores. Total economic loss in Thiruvallur district was estimated at ₹ 12 crores. Damage to fishing crafts and gears was estimated at ₹ 19 crores in Chennai, Kanchipuram and Thiruvallur districts of

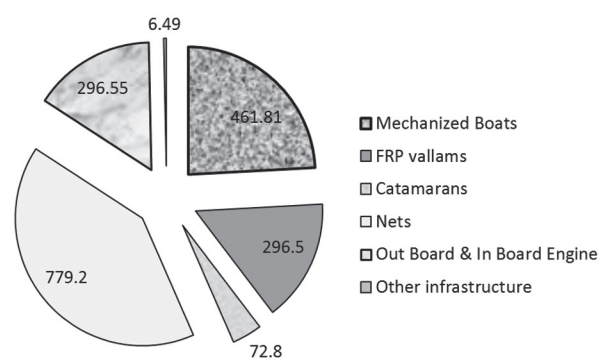


Fig. 1. Estimated cost of Physical damage (in lakhs ) caused by Cyclone Vardah to fishing crafts and gears in Chennai, Kanchipuram and Thiruvallur coastal districts (Source: Fisheries Department, Tamil Nadu)

Tamil Nadu and the economic loss due to loss in fishing days was estimated to be 13.4 crores (Table 1). Chennai coastal district was more impacted than other districts in terms of total economic loss whereas physical damage to boats and nets was higher in Thiruvallur district.

Total economic loss due to Vardha Cyclone in Chennai, Kanchipuram and Thiruvallur coastal districts worked out to be ₹ 32.5 crores. Fisheries Department worked round the clock and paid relief amount to the fishers based on the assessment of physical damages during January, 2017. As per the NDRF (National Disaster Response Fund) norms, Fisheries Department of Tamil Nadu assessed the damage of crafts and gears by Vardah Cyclone and disbursed relief amount to the fishers.