

Marine Fisheries Insurance in India: Opportunities and Challenges

Shinoj Parappurathu

ICAR-Central Marine Fisheries Research Institute, Kochi

pshinoj@gmail.com

Introduction

Technological advancements in the realms of vessel propulsion, gear design, navigation-system as well as information-communication have resulted in intensification of investments and thus deepening of economic risks associated with marine fishery operations. The risks in capture fisheries include a variety of factors such as loss or damage to fishing vessels, equipment and gear in operation, loss of catch and human casualties in the sea. Though such risks and dangers are inherent with marine fishing operations, their economic implications are manifold in recent times, particularly for the small-scale fishers and boat owners. The risks associated with fish culture in marine environment (mariculture) is also equally important in the wake of disease incidences, climate change and consequent weather factors, harmful algal blooms (HAB) and other natural calamities. Despite the above state of affairs, institutional mechanisms to address risk and uncertainties in the marine fisheries/mariculture sectors have been grossly inadequate in India. Insurance is one of the widely adopted means for risk management and is used the world over as an effective instrument for containing and mitigating a wide variety of risks such as asset risks, production and management risks, market risks, personal and health risks. Insurance in fisheries is by far under-utilized compared with other sub-sectors of agriculture in the country, barring a few local exceptions, and therefore unavailable for the majority of the stakeholders in this sector. This is notwithstanding the growing demand for risk management solutions from the fishing community across the country.

Present status of marine fisheries/mariculture insurance

Except for the presence of a few public sector insurance companies and cooperative bodies at the local level with limited scale of activity, fisheries insurance has only received limited attention. The private sector operation in this arena is also limited to a few cases scattered over time and space. Among the available options, the ‘Group Accidental Insurance Scheme for Active Fishermen’ is the only major programme presently in operation that covers the life/disability risks of the boat crew. Under this, the insured fishermen (reserved for age group of 18-70 years) get a claim of Rs. 2.0 lakhs in case of permanent disability/accidental death, and Rs. 10.0 lakhs in case of partially disability. The premium is fully subsidized and borne by the central government and state governments on 50:50 basis. A similar scheme in operation under the patronage of Matsyafed in Kerala provides a compensation of Rs. 10 lakhs to the dependents of fishermen who die in accidents. It also covers partial disability and hospital expenditure of injured fishermen with payments varying from case to case. Vessel/

gear (fishing net) insurance is another major risk management tool to secure the livelihoods of fishermen against the risks in the seas. The conditions for vessel insurance vary significantly depending on the type of vessels, area of operation and companies involved. However, the annual premium generally ranges between 3-5 per cent of the value of vessels and even higher at times. Compensation is generally paid only in case of complete damage of vessels. They include the New India Assurance Company Ltd., Oriental Insurance Company Ltd., National Insurance Company Ltd., and United India Insurance Company Ltd. and a majority of the active policies are credit-linked. Vessel insurance is also offered by Matsyafed for member fishermen on vessels purchased under their subsidized loan scheme. A similar subsidized vessel insurance scheme is being offered by the government of Tamil Nadu for vessels operating from various harbors within the state. In Tamil Nadu, an initiative under the aegis of International Fund for Agricultural Development (IFAD) namely Post-Tsunami Sustainable Livelihood Programme (PTSLP) was launched in six coastal districts stretching from Thiruvallur to Kanyakumari in 2007-08. Among the various diversified activities in the coastal region, the programme runs a comprehensive insurance scheme (launched in 2017) covering thousands of fisher folk in the target areas. The scheme is run by a community institution namely PTSLP Fishing Asset Risk Mutual Society (PFARMS) incorporated for the specific purpose. PFARMS operates insurance schemes in partnership with District Level Fishermen Federations (DLFSF) of SIFFS and insurance companies (presently, UIIC). Various risks such as life, health, personal accident and fishing assets (fishing vessels and equipment) are covered under the scheme (PTSLP, 2020). PFARMS collects a premium amount of 1 per cent of the value of fishing asset insured every year, adjusted for a depreciation of 20 per cent annually. Individual claims of fishermen (less than ten at a time) are settled by PFARMS, whereas in case of massive losses in case of disasters, the insurance company takes over the responsibility of claim settlement. Apart from these, boat owners' associations based at certain harbors are providing special risk coverage against damage of vessels to member fishermen (Eg: Neendakara harbor in Kollam district of Kerala, Paradeep harbor in Odisha; Mangrol harbor in Junagadh district of Gujarat). Insurance coverage of coastal immovable assets (houses and other immovable property) is another important risk management measure which every fishermen family ought to have. Unfortunately, the 'Disaster Risk Insurance Product for Coastal Communities' introduced in the aftermath of Tsunami (2004) in Tamil Nadu is the only major experiment in this regard so far. This scheme piloted by Bajaj Allianz with assistance from CARE India, provided micro-insurance to nearly 75,000 coastal families in Tamil Nadu and proved worthy during the cyclone Nisha that hit the coasts in 2008. This was discontinued subsequently. As of now, no major programmes/schemes exist to deal with risks and uncertainties related to mariculture operations. In a pilot programme, the Government of Kerala attempted to introduce a mariculture Insurance scheme for green mussel farmers in Padanna estuary region in 2017. The scheme was however discontinued later due to excessive claims. A summary of various existing schemes of marine fisheries insurance in India is presented in Table.

Description of insurance policies in force in capture fisheries sector in India

Types of risks insurable	Present status	Specific schemes/policies in force
Life/disability of fishermen/boat crew	Central Government schemes available in all states but with differential level of penetration. Fairly well covered in Kerala and Tamil Nadu.	Accident insurance coverage through Central scheme on 'Pradhan Mantri Suraksha Bhima Yojana (PMSBY) (FISHCOPFED, 2020); 'Fishermen Personal Accident Insurance Scheme' of Matsyafed in Kerala (Matsyafed, 2020); Group accident insurance schemes offered by the State governments in Kerala and Tamil Nadu; Accident insurance offered by Post-Tsunami Sustainable Livelihood Programme (PTSLP) in Tamil Nadu; Group accident insurance for fishing crew provided through South Indian Federation of Fishermen Societies (SIFFS) in Kerala and Tamil Nadu (SIFFS, 2020); Micro insurance schemes of DHAN Foundation in Andhra Pradesh (DHAN Foundation, 2020).
Partial/complete damage of fishing vessels	Coverage to complete damage of hull/engine of fishing vessels. Scanty coverage in inland fisheries.	Direct vessel insurance schemes and credit-linked schemes offered by the public general insurance companies; Vessel insurance offered by Matsyafed in Kerala for member fishermen on vessels purchased under their subsidized loan scheme; Subsidized vessel insurance schemes offered by the government of Tamil Nadu; Vessel insurance under the 'Fishing Asset Insurance' scheme of PTSLP in Tamil Nadu (PTSLP, 2020); Special risk coverage against damage of vessels offered by boat owners' associations based at certain harbors (Eg. Neendakara harbor in Kollam district of Kerala, Paradeep harbor in Odisha; Mangrol harbor in Junagadh district of Gujarat) (Parappurathu <i>et al</i> , 2017).
Loss/damage to equipment/fishing gears	Very few independent schemes are on offer.	Specific insurance policies offered by public insurance companies on demand. Certain vessel policies also cover gears but with extra premium. Not available in inland sector.
Damage to coastal assets of fishermen	A few schemes offered by private companies in liaison with NGOs in the recent past.	A joint programme operated by Bajaj Allianz and CARE India was operational in the coastal districts of Tamil Nadu during 2007-2010. No other schemes are known to cover the disaster risks of immovable coastal assets of fisher folk presently

Source: Compiled by author

Level of adoption

An assessment of the adoption of various types of personal/group accident insurance schemes across selected maritime states based on a primary survey conducted by ICAR-CMFRI in 2016 revealed that about 80-100% of the sample fishermen were covered under accident insurance scheme in Kerala, a state with the highest level of adoption (Table 2). In Tamil Nadu, the coverage ranged from 16-100% across the landing centres surveyed. On the other hand, none of the respondent fishermen were insured in Andhra Pradesh, despite it being a state with high incidence of extreme weather events. The states of Gujarat and Odisha were no better with only large landing centres well served leaving out the majority of smaller ones.

Percent of sample fishermen who adopted various types of fishery insurance schemes in selected maritime states of India

State	District	Per cent of sample fishermen/ vessel crew who adopted insurance of type:			
		Personal/group accident insurance	Vessel (hull) insurance	Fishing gear insurance	Coastal asset insurance
Kerala	Kollam	100 (45)	12 (25)	0 (25)	0 (45)
	Alappuzha	100 (20)	50 (10)	10 (10)	0 (20)
	Ernakulam	79 (38)	17 (23)	0 (23)	0 (38)
	Kasargod	87 (15)	0 (5)	0 (5)	0 (15)
Andhra Pradesh	Vizianagaram	0 (22)	0 (17)	0 (17)	0 (22)
	Srikakulam	0 (24)	0 (19)	0 (19)	0 (24)
	Vishakhapatnam	0 (14)	0 (9)	0 (9)	0 (14)
Tamil Nadu	Cuddalore	16 (44)	0 (29)	0 (29)	14 (44)
	Puduchery	100 (10)	10 (10)	0 (10)	0 (10)
	Villupuram	96 (50)	0 (40)	0 (40)	0 (50)
Gujarat	Junagadh	35* (20)	47* (15)	0 (15)	0 (20)
	Gir Somnath	55*# (20)	33* (15)	0 (15)	0 (15)
Odisha	Ganjam	0 (47)	0 (37)	0 (37)	0 (47)
	Jagatsighpur	50* (20)	100* (10)	0 (10)	0 (20)

Note: Figures in parentheses denote total number of respondents applicable under each category; adoption estimates pertaining to vessel and gear insurance are based on responses of vessel owners only.

*Indicates risk coverage against personal accident and vessel damage provided by boat owners associations for their members; #The estimate includes personal accident insurance availed by vessel crew under government schemes.

Source: Parappurathu *et al.*, 2017 *Marine Policy*, 86: (144-155).

The level of adoption of vessel insurance is also not inspiring as per the study. Except in the case of large landing centres in Paradeep, Odisha; Magrol and Veravel in Gujarat, where influential boat owners' associations operate their own insurance programs with the help of revolving corpus funds collected from member fishermen, the coverage of vessel insurance is hardly satisfactory across the maritime states. Insurance coverage of fishing nets is even worse with most of the fishermen having opted out of it irrespective of the region they belong to.

Main challenges

There are a number of issues that explain the reasons behind low risk financing of the marine fishery sector in India. In most of the places, the fishers / mariculture farmers are either unaware or are less concerned about the need to insure their assets against various types of risks. In certain cases like vessel insurance in Kerala, people are well aware of insurance, but are reluctant due to high premiums involved, lack of provision for claim settlement in case of partial damage, high hassles involved in claim settlement process, reservations about timely and assured settlement of claims and so on. As enrollment is lower due to the above reasons, the insurance companies have limited options to develop products that are affordable. The companies are also concerned about malpractices such as intentional dumping of fishing vessels, especially old and less energy-efficient ones, to secure claims. Unlike in land, the mechanisms to detect such malpractices are scanty. At many places, the fishermen/fish farmers point to lack of availability of adequate insurance options as one of the reasons for their non-enrollment. This is particularly relevant for private insurance, wherein the industry has never explored the potential of launching suitable products for a number of risks citing low interest of fishermen, poor demand for insurance, low profitability, high risk involved, high moral hazards, and so on. In short, insurance in India's coastal fishery suffers from problems such as lack of transparency, low affordability, high moral hazards and poor customer acceptance.

Technology and policy perspectives for reforms

There is immense scope to reform the coastal asset and fishery insurance through concerted efforts at the Central and State levels. Strong measures from both government and insurance companies are needed to inculcate risk financing culture in the coastal areas. There is also a need to improve the mutual reciprocities between insurance companies and fisher folk. Developing linkages with fishermen/fish farmer cooperatives, producer associations, etc. would prove beneficial in this respect. Ensuring the participation of grass-root level organizations (fishery cooperatives/NGOs/boat owner associations) as intermediaries or partners for insurance administration besides deploying of a brigade of rural insurance agents/service providers would also be helpful to strengthen grass root level support services. Micro-insurance is a promising avenue particularly to administer coastal asset insurance. India can learn from successful initiatives from other Asian and African countries on this front. Bundling micro-credit with asset/disaster insurance programs is also a sensible option to enhance coverage of schemes in areas where self-help groups have active presence. There is a general discontent among fishermen/fish farmers about high insurance premium and

unavailability of custom-made insurance products. To address this, it is important to bring-in flexibility in insurance schemes through options such as payment of premium in installments, partial coverage of fishing units and augmented products with coverage on fishing gear. Willingness on the part of insurance companies to compensate partial damage of fishing vessels would certainly make a visible dent in changing the attitude of fishermen towards insurance. They may also think of launching new products in hitherto un-serviced areas like cage culture, seaweed farming and mussel culture after proper assessments on profitability. The governments should strive towards developing adequate dispute settlement mechanisms to address grievances, besides taking measures to increasing competition in the sector by incentivizing the entry of new players to the sector. They may also consider reallocating some of the existing unhealthy subsidies towards incentivizing greater insurance coverage. If required, the governments can introduce some degree of legislative coercion through mandatory insurance coverage, wherever possible. Special incentive packages may be extended to the islands which are the most vulnerable, therefore deserving distinctive treatment.

Together with reforms in governance, technology can play a vital role in improving efficiency, bringing transparency and reducing moral hazards in fishery insurance. Innovative products such as weather-index based insurance schemes have already been in force in the agriculture sector, wherein, satellite data and inputs from weather stations are being used to trigger insurance payments in case of occurrence of weather related events. These can be extended to capture fisheries sector as well, to increase efficiency and simplify procedures. The inputs from such platforms could be used for compensating damages to coastal assets of fisher folk, marine cages, and other fishery-related infrastructure. Similarly, advanced vessel monitoring systems (VMS), which are presently in the pipeline to be introduced in India, could be made use of to track the fishing vessels and assess incidents such as mid-sea capsizing and collisions. Such data would be valuable for the insurance companies to verify insurance claims by affected beneficiaries. Further, interactive ICT tools and mobile applications could be leveraged for speedy processing of insurance claims as well as for real-time assessment of damages incurred to fishing vessels and mariculture units in case of calamities.

In view of the above opportunities, there is a need to revitalize marine fishery insurance in India, particularly when the investment stakes in the sector have gathered weight in recent times. For this, measures such as leveraging the potential of technological interventions, developing innovative institutional mechanisms, bridging the trust deficit and bringing about attitudinal changes through awareness drives are suggested. Promising options such as micro insurance, which has already proved its potential to change the lives of resource poor people in various parts of the world, can also contribute a great deal in this endeavor. Over and above these, long-lasting efforts to improve the socio-economic conditions and living standards of the fishing community through development programs can complement in no lesser extent.
