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CREDIT AND INSURANCE REQUIREMENTS FOR SUSTAINABLE AQUACULTURE DEVELOPMENT

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Shrimp aquaculture fetched India, foreign exchange to the tune of Rs. 30,000 crores in the year 2019-20, with a reported farm production of seven lakh metric tons of shrimp. Only the Indian basmati rice and meat export figures are comparable to the shrimp export performance. Apart from this, the estimated domestic consumption of shrimp within the country was also around 60,000-70,000 tons in 2018-19, which is likely to increase further with increase in personal disposable incomes.

Brackishwater aquaculture employs more than a million people in remote coastal rural areas in India. More than 1.5 lakh ha of coastal saline land is under shrimp aquaculture, where other entrepreneurial avenues are limited. The IRR (Internal Rate of Return) from shrimp farming is very high; ranges higher than 65% in many of the aquaculture projects. Structurally, the aquaculture sector in India is dominated by small scale farmers with less than 2 ha size (i.e., on an average of two ponds per farmer).

Credit in the aquaculture sector

Aquaculture is a big business opportunity for banks as well. The capital required for shrimp aquaculture is estimated to be more than Rs. 7.5 to Rs. 10 lakhs per ha of farming in India and Rs. 15,000 lakh crores for the Indian Aquaculture sector on the whole on assets such as ponds, aerators, generators, and other valuable items.

Apart from this, modern aquaculture segment also requires a minimum of Rs.10,000 to 15,000 crores credit for each crop period, and the role of credit is vital for the sustenance of the sector. As the supply chain is fully interconnected and transparent in the shrimp value chain, the loan recovery process is easy for credit institutions, when compared to many agricultural, industrial, and other sectors.

The Indian government could ease the credit policy and prod the formal credit sector to sanction collateral-free loans or credit with lower collateral for aquaculture with an increase in productivity. The importance of credit and insurance support required for farmers cannot be undermined, irrespective of technological advancements and commercial viability of shrimp farming. Organizations such as the National Fisheries Development Board (NFDB) should step up its efforts to streamline aquaculture crop insurance to farmers, as already sufficient efforts have been put up in this regard. The National Bank for Agriculture and Rural Development (NABARD) should devise methods of access to credit without collateral. Joint Liability Group (JLG) should be promoted in the aquaculture sector also and other systems of collective protection may be designed to safeguard farmers as well as banks. These efforts will ease the problems of small and marginal shrimp farmers who are the backbone of the sector.

Practical issues in insuring aquaculture crop

While aquaculture farms are extremely vulnerable to periodic climatic events such as floods and cyclones, the farmed aquatic animals are also prone to a couple of lethal diseases. Produce is sometimes wiped off when these diseases strike, making small farmers lose lakhs of rupees spent on-farm operations and seed purchases. Therefore, providing essential support with an effective insurance product to the aquaculture sector, which is widely considered as "risky" by bankers and insurers, is a challenging affair. The NFDB has proposed to subsidize the insurance premium, and the scheme is yet to reach the farmers in practice. Though a couple of insurance companies have aquaculture crop insurance schemes in their kitty of insurance products, the actual farm coverage is negligible. They are to go a long way to make an impact in risk coverage as desired by the aquaculture farmers due to many practical issues. However, though insurance coverage is essential for small farmers and bankers are willing to finance the aquaculture sector in India, there are several constraints, as detailed below both to farmers and insurance companies in taking up and providing insurance schemes for aquaculture in India.

Problems faced by aquafarmers as insured policy holders

1. Expensive premium rates (8-10%) demanded by insurance companies.

2. The unilateral discontinuance of insurance cover after a crop failure by the insurance companies as happened after the golden period of growth (1990-1994).

3. The cumbersome documentation and 'small print' of terms and conditions and a massive list of exclusions "named perils".

4. Practical difficulties of notifying insurance companies on emergency harvest situations.

General concerns of Insurers

1. Scarcity of fisheries professionals in insurance companies and poor understanding of modern aquaculture systems and practices by generalists.

2. Worries about falsified claims.

3. Fear of huge losses in an epidemic/ new disease attack.

4. Workforce requirement and expenses burden of premium collection from a large number of farmers across the country.

For a better and robust insurance scheme, there is a need to mitigate the fears and difficulties from both the side of insurers and insured. The government can

support the aquaculture crop insurance in the following ways:

1. Providing insurance as a central sector scheme by engaging state fisheries departments.

2. Providing 50% or more subsidy on insurance premium paid by the farmers as Direct Benefit Transfer.

3. Providing reinsurance to insurance firms at a reasonable and subsidized cost.

4. Ensuring sustenance of insurance scheme with an insurance stabilization fund as being done by some developed countries for different enterprises.

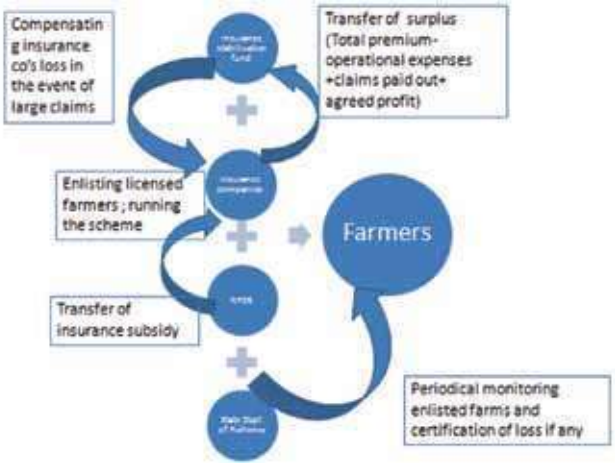
The first option however, is not workable on many counts, known to all, due to inherent issues in various state fishery department administrative setups.

The second option is the NFDB scheme. This scheme allows insurance companies to make and break their fortunes in light and dark periods of aquaculture. While increased business profits may be lucrative in the short term, in the long term, when claims are to be settled, insurers may feel bitter when the size of the total claims may be large in the event of large-scale disease occurrence. Though reinsurance schemes are available to the insurance firms from the global level players, special terms and conditions are needed for aquaculture insurance.

Government of India can establish an "Insurance stabilization fund" with a corpus of Rs.100 crores (or more) to be operated by a consortium of stakeholders' viz., representatives of insurers, and insured along with official side nominees under the control of the ministry.

Though only an area of 93,496 ha is reported under *P. vannamei* farming by MPEDA (2019), expert estimates of area under culture are almost double, if freshwater vannamei farming is also included. But only a fraction of these farms could get the license from CAA due to real-world issues. Hence an insurance coverage scheme may be run on a pilot scale in few clusters of registered farms with the involvement of a couple of willing insurance companies. Insurance companies can be allowed to reinsure with reinsurers if required on their own. Monetary component may be provided to state department fisheries for expenses on TA/DA of their staff involved.

A theoretical model that can be implemented is schematically represented below.



Conclusion

Despite bio-security and all precautions, curable and incurable diseases do occur in ponds (probability-0.27), leading to losses to farmers. Insurance can help small farmers to tide over such crop losses. The risk to insurance companies is limited as the crop is only for a duration of 100 to 110 days and after 60 days, salvage value will help to reclaim breakeven costs to farmers and reduce the liability to insurers. When a farmer harvests a good crop, the insurance company will transfer the surplus to the insurance stabilization fund after deducting their administrative expenses and claims paid, if any. When large scale claims are received due to disease occurrence or any other reason, the insurance stabilization fund will compensate the loss to the extent as agreed upon. Insurance companies will have the freedom to reinsure with reinsurers as per their choice, which will be out of this scheme to protect their financial interests. As farmers essentially need insurance only for 60 days of the crop the scheme can be operational for a specific culture duration. After 60 days, farmers can breakeven most of the cost of expenses with the harvest of the standing crop and its sale. The pilot scheme can be extended phase wise after a minimum of four crops to more, by including more farmers, other aqua-crops, more insurance firms, and increased corpus of Insurance stabilization funds.