Task Force on Use of Technology for Agriculture Insurance

Sub Group – 5: Livestock and Aquaculture

RECOMMENDATIONS

25th October 2016

New Delhi

Livestock Insurance: Recommendations

1. **Animal Identification programme** be implemented mandatorily in all the States and GoI may bear the major expenses for the same.
2. **Do away with Retagging of animal with policy renewal.** RFID technology may be a solution and Portability of tag number across insurers be operationalized for continuation of insurance.
3. **Mobile phone based technologies** maybe introduced for use in reducing policy inception and claim settlement time
4. **Muzzle printing:** Muzzle printing is a cost-effective system of identification of animals and should be introduced on wider basis.

Livestock Recommendations contd..

6. '**No tag no claim policy**' should be done away in case the livestock gets washed away during floods.
7. Conditions like mastitis which often permanently or partially disable the animal need to be covered under **Permanent Total Disability (PTD)/ Permanent Partial Disability (PPD)**.
8. **Livestock Disease Insurance:** Cost of medicines and surgical operations should be included in the insurance schemes like Vet Mediclaim Policy in UK and USA.
9. **Index Based Livestock Insurance** may be piloted to tackle the problem of loss of yield due to heat stress and increasing adverse climatic occurrences
10. **Proper valuation of livestock** particularly dairy cattle and buffalo should be done to ensure adequate insurance coverage to the farmer.

Livestock Recommendations contd..

12. All steps may be taken to **increase awareness** among farmers and animal owners regarding existing schemes and need.
13. **A dedicated army of local grass-root level insurance agents**/service providers is critically required under NGO / Social Enterprise / Private sector to assist the farmers for providing integrated services.
14. **Role of IRDAI**: Product Management Committee (PMC) of each General Insurance Company should be given some discretionary authority to approve rural and micro-insurance product targeted for the farming community.
15. **Insurance Information Bureau (IIB)** should be empowered to maintain data bank on cattle, livestock, horticulture, poultry and fishery/aquaculture.

Livestock Recommendations contd..

16. **Additional perils to be covered in the existing policies**:
    a. **Theft of the animal:** Theft of the animal is not covered at present. It should be covered with additional premium.
    b. **50% payment clause** for pregnant animals should be removed as it is a double loss to the farmer.
    c. **Capital based livestock risk insurance** on lines of loss of profits insurance should be evolved
    d. **Transit risk should be enhanced** from 80 km to 200 kms, since the farmer has to travel to distant places to search good quality animals.
    e. **Insurance of feed, fodder and pastures**: at present there is no policy to cover these. It should be linked with cattle master policy.

Technological Solutions for Advancing Fishery Insurance

- ***Capture fisheries:***
- Satellite-based damage assessment protocols for assessing damages to inland (along rivers, reservoirs and lakes) and coastal assets of fisher folk and other fishery-related infrastructure could prove handy for the insurance industry for assessment and settlement of claims in case of natural calamities.
- The Government of India is presently working on mechanisms to track vessels operating in India's Exclusive Economic Zone (EEZ). Advanced vessel monitoring systems (VMS) could be made use of to track the fishing vessels and assess incidents such as mid-sea capsizing, collisions, etc. Tracking with VMS is highly cost-effective compared to alternative mechanisms presently being relied upon and hence could be used by the insurance industry to verify claims.
- Interactive ICT tools /mobile applications could be leveraged for real-time assessment of damages incurred to fishing vessels and crafts, coastal and inland fisheries assets, etc. in case of calamities.

Technological Solutions for Advancing Fishery Insurance

- ***Aquaculture/ Mariculture:***
- Advanced tools such as remote sensing, GIS, weather forecasting, etc. could be used for developing base-line scenarios (for identifying losses) of aquaculture farms/ marine bays in a region.
- Inventory management is an integral component of aquaculture/mariculture insurance. The insurance companies could make use of advanced ICT tools and GIS platforms for developing inventory data base (on variables such as locations with GPS coordinates, date of stocking, stock sizes, progress of the crop (hydro-acoustics and digital video survey can be used for assessing the crop loss), etc.) of insured farmers, which would not only simplify monitoring procedures but also make them transparent and the farming practice more technology oriented.

Technological Solutions for Advancing Fishery Insurance

- ***Aquaculture/ Mariculture:***
- Satellite imagery-based surveillance models could be used to assess the progress of the crop and changes in associated parameters that would be useful for determining the health of the crop at various intervals and possible incidence of disease, HAB and other harmful, infestations. Such information would be valuable to plan mid-course interventions in aquaculture farms as well as marine cages.
- In case of damage due to diseases or other natural calamities, the extent of damage could be ascertained based on satellite-based damage assessment protocols and such data can be integrated with index-based insurance products for compensating the insured farmers.

Pre-requisites for Implementation of Technological Interventions

- **One of the basic pre-requisites for leveraging the above opportunities is to develop formal linkages between the centers of learning with the above mentioned technological capabilities and the insurance sector**
- The national organizations such as Indian Space Research Organization (ISRO), India Meteorological Department (IMD), Indian Council of Agricultural Research (ICAR), Indian National Centre for Ocean Information System (INCOIS), National Institute of Oceanography (NIO), etc. can play significant role in supplying the necessary scientific inputs required for enabling the above mentioned technological interventions

Fisheries and Aquaculture: Recommendations

1. Index-based insurance products may be explored in appropriate cases with adequate technological backstopping.
2. A dedicated cell/agency may be created to act as an interface between the various scientific institutions and other stakeholders for facilitating technological upgradation. IRDAI suggested.
3. Early claim settlement and use of technological advancements in ICT for fool-proof insurance claim mechanisms.
4. Renewal of fishermen licenses be linked to compulsory enrolment to personal/group accident insurance policies (PMSBY).

Fisheries and Aquaculture: Recommendations

5. Bundling disaster risk insurance packages with savings programs and existing micro-credit schemes could prove to be a viable option.
6. Index-based insurance schemes that trigger based on pre-set threshold of annual stock assessment values or catch per unit effort estimates may be explored on a pilot basis to compensate large scale stock declines in fishery.
7. Special insurance packages that cover the risks of mariculture units/marine cages, bivalve units, brood bank/hatchery units and seaweed farming units need to be introduced on a priority basis.
8. A separate insurance-litigation division may be set up to address the grievances and disputed cases.
9. The participation of private companies is to be boosted in the field of fishery insurance to increase competition.

Fisheries and Aquaculture: Recommendations

10. Involvement of local grass root level organizations as intermediaries for implementing insurance schemes (e.g.. Matsyafed in Kerala).
11. Dedicated local grass-root level insurance agents/service providers to be recruited to enhance delivery of support services in the field and to create awareness.
12. Promote cluster farming by constituting farmers' societies, so that insurance companies can directly deal with the society on matters of premium collection and claim settlements.
13. The list of exclusions under the existing aquaculture insurance policies is long. Perils such as theft, loss due to malicious activity by third party, losses on account of pollution, summer kill, drought, etc., need to be covered.

Fisheries and Aquaculture: Recommendations

14. Cost of medicines/ treatment should be included in the insurance schemes. All OIE listed and locally prevalent diseases should be covered under aquaculture/ mariculture insurance schemes.
15. Insurance of Fisherwomen be introduced.
16. For affordability and flexibility, options such as rationalization of existing premium rates, payment of annual premium in instalments, partial coverage (sum insured) of the insured units, etc. should be explored.
17. Compensation for partial damage (mainly due to diseases in aquaculture/Mariculture and due to collisions, fire, engine failure due to accidental causes, etc. in case of fishing vessels) be included in insurance packages.

Fisheries and Aquaculture: Recommendations

15. Vessel insurance should be made compulsory for the fishermen , but to be implemented in a phased manner.
16. Create awareness among fishermen and aqua-farmers about various insurance programs in offer and the provisions involved in collaboration with different networks
17. A National project on ‘Marine Fisheries, Mariculture and Coastal Aquaculture related Hazard Assessment and Risk Mapping along the Indian Coastline’ should be taken up to throw light on the risk profile and to provide valuable insights for future reforms in the sector.

THANK YOU