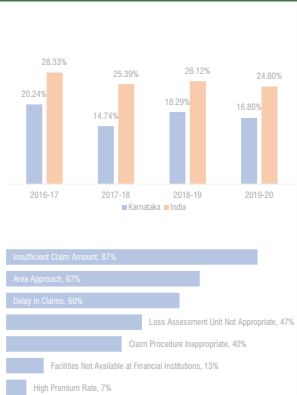




Crop Insurance in Karnataka: Challenges and Policies

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1. Introduction

Agriculture in Karnataka is a vital part of the state's economy and provides employment to a significant number of people. However, growth in this sector is limited by a variety of different forces, and incomes tend to fluctuate significantly, putting the livelihoods of these people at risk. One of the main factors inhibiting growth is the predominance of rain-fed farms, affected by the vagaries of the weather. These create fluctuations in farm incomes that put farmers in a precarious position. Protecting farm livelihoods requires adopting risk mitigation strategies to ensure stabilization of farm incomes.

To understand which risk mitigating strategies are appropriate, it is important to discuss the types of risk faced by farmers. We may classify the main types of risks farmers are exposed to into three categories: Production risks, price risks and input risks.

Production risks arise from weather-related risks and risks from pests and disease, price risks occur due to the unpredictability of demand and instability of demand expectations, and input risks arise from shortages of inputs and variance in their prices. Of these three risks, production risk is the most significant as it completely destroys produce and income, so we focus primarily on methods to alleviate this issue. One of the most effective ways to protect farmers against this type of risk is through crop insurance.

Crop insurance is already available to farmers in Karnataka, and the government has undertaken several initiatives to promote it, a notable one being the Pradhan Mantri Fasal Bima Yojana. Though its adoption has improved over time, it has remained at lower than a desirable level. Therefore, it is important to understand the factors that are limiting the uptake of crop insurance among farmers, and the possible remedial policy measures that can assist in assuaging this problem.

This policy brief is primarily based on two of our earlier studies on the farm sector where we studied various problems faced by peri-urban and rural farmers in general and the adoption of crop insurance in particular. To have a macroeconomic perspective, we examined the state of crop insurance in Karnataka using secondary data from the National Sample Survey Office (NSSO). Simultaneously, we carried out primary field surveys for a ground level perspective in order to complete the following research objectives that can help improve the situation of farmers in the state through better crop insurance adoption.

2. Objectives

- Understand the kinds of risks farmers face and how they currently mitigate them
- Farmers' knowledge and perceptions regarding crop insurance
- The current status of crop insurance in terms of its adoption, and reasons for its non-adoption, if any.
- The problems faced by farmers who adopted crop insurance in getting benefits from such schemes and the suggestions they have for the improvement of such schemes, if any.
- Whether any specific group of farmers needs special attention for crop insurance policy.

3. Methodology

This policy brief is based on data collected from both secondary and primary sources. In order to obtain an overview of the status of crop insurance from a national perspective, we make use of the NSSO's 70th round (2012-13) Situation Assessment Survey unit level data. These surveys define a farm household as one in which at least one member is a farmer, possesses some land, and has engaged in agricultural activities on any part of the land during the preceding 365 days. Altogether, there are 35,200 households included in the 70th round survey's central sample.

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Available insurance schemes in the states of Tamil Nadu, Punjab, Haryana, Rajasthan, Maharashtra and Gujarat were studied to better understand their structure, terms and conditions, and their relative performance in order to help inform this research better.

Following a national level analysis and a look at the status of crop insurance in other states, the prevailing status of crop insurance in Karnataka was understood through the use of data provided by the Agricultural Insurance Company of India Ltd. as well, which was responsible for dealing with crop insurance in the state in 2015.

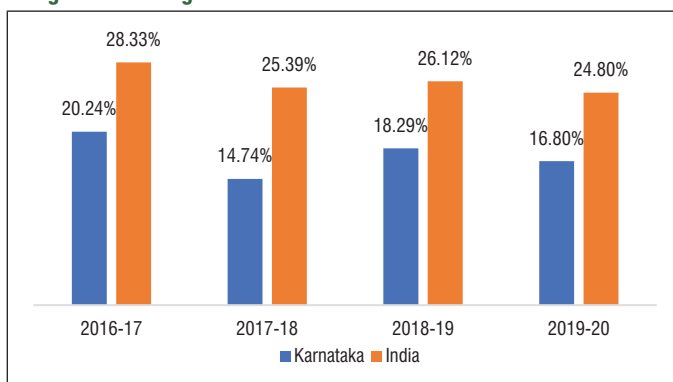
To obtain a more complete picture of the status of crop insurance in Karnataka, a primary survey in four districts in Karnataka was carried out to get a clear and more recent picture of the ground reality that throws light on the difficulties and constraints perceived by farmers in accessing crop insurance. In addition, we have held discussions with the farmers in peri-urban Bangalore considering Devanahalli and Magadi taluks.

A representative sample of 120 farmers (both insured and non-insured) was selected from four districts (30 from each district) in discussion with bank officials for insured farmers, and the taluk's Raita Samparka Kendras for non-insured ones. Focus group discussions were conducted with farmers, insurance companies, and agriculture department officials in each district to obtain a qualitative picture of crop insurance performance. We have studied Chitradurga district which allowed an understanding of the Unified Package Insurance Scheme, which was then operating on a pilot basis.

4. Key Findings from the Secondary Data

Despite decades of targeted policy towards improving crop insurance adoption, this figure is still considerably low in India. Looking at the area insured under all insurance schemes, figure 1 shows that less than a quarter of the area cultivated in India falls under the ambit of formal crop insurance.

Fig 1: Percentage of area insured under all insurance schemes



Source: Pocketbook of Agricultural Statistics, 2020

The situation in Karnataka is more dire, judging by the estimated figures, as less than 17% of farmed land in the state has been brought under crop insurance, and this figure has been declining in recent years. The percentage of farmers insured may be even lower, as data from 2013 shows that it was below 10% (NSSO 70th Round, 2012-13), and was as low as 4% in 2003 (NSSO 59th Round, 2003).

To better understand how to improve this situation, we need to determine the drivers of crop insurance adoption and look at the areas where the focus is required. In order to do this, the 70th round NSSO data (2012-13) on the Situation Assessment Survey of farmers has been used to carry out a regression analysis at the all-India level (Rajeev and Nagendran, 2019), whose lessons would still be valuable today. It was found that farmers with more land are also more likely to have crop insurance. However, small and marginal farmers have low incomes and are more likely to be harmed by crop loss or crop failure. Thus, there needs to be a focus on improving insurance adoption among this group. Similarly, socially vulnerable and deprived groups such as SCs or STs were found to be less likely to have crop insurance than others, and this category also needs special attention from policymakers.

Geographically, it was found that farms in the northern and north-eastern parts of the country were less likely to be insured than those in other areas.

When looking for ways to improve crop insurance adoption, the regression revealed that households with livestock income were more likely to have crop insurance, pointing towards the benefits of farm activity diversification. Access to technical advice increased the likelihood of a household availing crop insurance as well, indicating the importance of increasing awareness. This increased awareness should be accompanied with improved education (and financial literacy), which was also an important factor in increasing crop insurance adoption.

Thus, poorer and marginalized groups were found to be in urgent need of support in the form of increased crop insurance adoption, especially in the northern and northeastern regions of the country. This can be facilitated by increasing farm activity diversification, improved awareness, and fostering financial literacy through education among farmers (Rajeev and Nagendran, 2019).

5. Experiences of Other States

Looking at other states' efforts towards improving crop insurance adoption, useful lessons could be taken from the case of Gujarat – where crop insurance is bundled with personal accident insurance at a zero rate of premium, and Tamil Nadu – where, in addition to personal accident insurance, there is also a provision for insurance for all primary sector workers including small and marginal farmers (and tenant farmers), agricultural labourers, plantation labourers and inland fisherfolk, as well as the dependents of such workers. More recently, the Prime Minister's Fasal Bima Yojana (PMFBY) was unveiled in 2016, and offers claim benefits to all farmers at a nominal premium of Rs 27. PMFBY covers yield-based insurance, weather-based insurance, and in some districts, a unified package insurance scheme that provides two additional insurance coverages at a meagre premium to improve popularity. Similarly bundling insurance products and expanding access to many more categories of workers could also be helpful in the case of Karnataka.

Data from the Agriculture Insurance Company of India Ltd. (for the year 2015) indicates that across Karnataka, 18.40% of farmers are insured, but it is less than 5% in 11 of the 24 districts for which data was

available. Complementary data from the Department of Agriculture, Government of Karnataka for the Kharif Season 2016-17 shows that only 12.20% of farmers were enrolled for the PMFBY (Prime Minister's Fasal Bima Yojana) in 2016, compared to only 11.14% of farmers in the NAIS (National Agricultural Insurance Scheme) in 2015, and total enrollment in the PMFBY and the Weather Based Crop Insurance Scheme (separate from PMFBY) amounted to just 13.53% of farmers. Therefore, it is clear that crop insurance rates can improve in the state and remedial policy measures are necessary. To discern which measures would be the most suitable, ground-level field surveys were conducted.

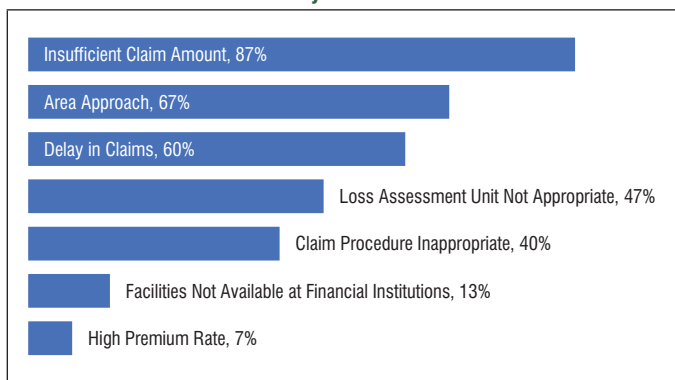
6. Findings from Field Surveys in Karnataka

The field surveys in Karnataka (both rural and peri-urban regions) reveal certain interesting features concerning crop insurance and the concerns of the farmers. In Mandya, Tumakuru and Kolar, it was found that the agricultural income of non-insured farmers was, on average, double that of insured farmers, which indicates that richer farmers did not adopt crop insurance as much as poor ones. Non-insured farmers were also found to have higher supplementary incomes from livestock. Regional rural banks served as the major source of borrowing for crop loans, which are also an important avenue for obtaining insurance coverage. Only a minority of farmers were aware of the compulsory nature of crop insurance for loanee farmers, however, and only a third had insured their ragi crop.

Interestingly, only a small percentage of farmers reported taking up insurance, but of those who did, many consciously used it as a tool for risk aversion or financial security during times of distress. However, farmers indicated that insubstantial claims settlements had dampened their enthusiasm for the scheme. Almost all households surveyed reported having faced crop losses during 2015, but settlement amounts were only around 20% of the value of the losses incurred on average (as only cost of cultivation is insured). Additionally, a majority of surveyed farmers did not understand the claims computation process, and many indicated the shortcomings of the area approach as being responsible for insubstantial compensation for losses.

Figure 2 below summarizes some of the major concerns with crop insurance schemes among farmers surveyed with the help of a bar chart.

Fig 2: Major Concerns with Crop Insurance Schemes Among Surveyed Farmers



Source: Computed from field data



As indicated in the figure, insufficient claim amounts were the most common sources of concern, followed by the area approach. Many farmers also indicated that delays in claim payments and inappropriate land units used for loss assessment were also important reasons for dissatisfaction.

The Unified Package Insurance Scheme operating in Chitradurga, on the other hand, was found to be relatively better performing, with many respondents reported having insured their crop, though a large minority had adopted it only because of compulsion by banks while taking crop loans. The claim amounts, however, continued to be low as in the case of other districts. Respondents indicated personal accident insurance cover and disability risk cover as the major reasons for enrolling in UPIS, indicating the advantage of bundling insurance products.

Farmers from the peri-urban regions of Bangalore reported that land holdings had become rather small due to their selling them. As a consequence, they were unable to engage in cultivation of cereal crops and this had forcibly diverted them towards floriculture. However, flower cultivation is not in the ambit of crop insurance, which is another reason for low crop insurance cover among farmers in this area.

7. Policy Suggestions

Based on the findings from the field survey and analysis of secondary data, the following policy suggestions have been made for improving crop insurance in Karnataka.

Farmer and Village Level Measures

- Introduction of designated agents/extension services to improve awareness of crop insurance schemes. Such agents can focus on information dissemination when farmers come to collect inputs from RSKs, paying special attention to non-loanee farmers. It was found that printed handbills were difficult to understand even for literate farmers, so interactive sessions with insurance agents are required. Word of mouth and allowing farmers that have benefitted from the scheme to narrate their experiences to others can also be helpful in increasing crop insurance adoption. When asked about their preferred media for information about crop insurance schemes during our survey, Kisan Sabha was the most popular choice, followed by village melas, radio and television. Farmers also suggested the use of WhatsApp groups to disseminate information.
- Common services centers in the interior rural areas should be encouraged. They should be trained to carry out crop insurance enrollment. That will reduce the pressure on the banking sector.
- Training should be provided to farmers based on the resource base of a region to help them develop meaningful non-farm activities,

which can provide a cushion and resources for paying premiums. This can be initiated through the business development plan of local cooperative banks.

- Insurance agents should visit villages and sensitize farmers, as in the case of life insurance. Gram Sabhas and Raita Samparka Kendras (RSK) can be nodal points to provide information.
- Farmers should be sensitized to visit banks early in the cultivation process so as to avoid overcrowding at banks, and thus provide better attention to farmers. RSKs can take up an active role in this.
- A grievance redressal cell should be set up in each RSK, to reduce the considerable time and transaction costs of addressing issues related to crop insurance. A separate desk for farm loans and crop insurance should be set up in banks.
- Farmers also need clarity about picking multiple crops and how to settle claims (eg. cotton and chilli planted in one plot of land).

Bank and Insurance Company Level Measures

- Insurance claims should be settled in a time-bound manner to minimize distress to farmers. The authorities should expedite the claims settlement process, since severe delays faced by farmers currently make their survival during crop loss rather difficult.
- A no-claim bonus (for farmers not making insurance claims for three years or a similar timeframe) should be provided, either in the form of cash, kind (inputs), or in reduced premiums.
- Non-loanee and tenant farmers need to be encouraged to adopt crop insurance. Tenant farmers find it difficult to access credit due to lack of land records, and get eliminated in the process. They should be allowed to enroll in insurance with self-declaration and perhaps some verifications.
- There is a need for a separate regulatory authority to oversee premium fixing methodologies and other aspects related to crop insurance, since today there are both private and public sector participants in this area.
- Better transparency concerning the operation of private companies involved in crop insurance is required.
- Insurance companies should service a district for a minimum of 3 years, since seasonally changing service providers makes it difficult for the company to understand the needs of the region.

Improvements to Crop Insurance Scheme Formulation and implementation

- It is necessary to take farmers into confidence when formulating insurance policies, especially in the process of claim settlement. The system should be made more transparent and identify farmers who have had crop losses better.
- Farmers feel that usage of GPS-based smart technology can help in identifying crop losses and fix indemnities based on individual

crop loss. This, along with computerization of land records, can help in shifting from the area-based to the individual-holding-based approach.

- Crop insurance premiums should be subsidized further for marginal and landless farmers.
- Personal accident insurance should be bundled with crop insurance, since many farmers fall prey to snake bites, electric shock, and other accidents. This will also help attract more farmers to enroll in crop insurance.
- More crops should be eligible for crop insurance cover. In Karnataka, mulberry is currently excluded from insurance even though it is an important crop. Thus, sericulture should be brought under the ambit of crop insurance.
- The UPIS scheme has been popular with a majority of farmers in Chitradurga, and should be expanded to other districts as well. Farmers praise the included personal accident cover.
- A more technically efficient crop loss assessment mechanism should be put into place over time to instill confidence in crop insurance schemes.
- The minimum prescribed area for notifying a crop for loss assessment should be reduced so that more crops can be notified and more farmers can obtain the benefits of insurance.
- Damage due to wild animals should also be covered under the insurance scheme.
- Insurance should be provided on output value rather than input costs to benefit farmers substantially. In many developed countries such as Canada, this kind of crop insurance policy is adopted.

The government has already initiated the process of implementing some of these policies. If these policy suggestions are efficiently implemented on ground, then the crop insurance sector in Karnataka can transform into a robust support system for farmers that guards them against life-threatening income fluctuations, and improves the state of agriculture in the region.

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