An analysis of farmers perception and awareness towards Pradhan Mantri Fasal Bima Yojana scheme as a tool for risk management in Thiruvarur District of Tamil Nadu

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Abstract

Agriculture, which is an important sector of National economy, is considered widely as an industry. Agriculture in India is highly susceptible to risks like droughts and floods. India has a long coast line. Rice is the major staple crop in the coastal region, groundnut, coconut, and cashew are some of the other crops that are predominant in the coastal areas. Tamil Nadu is one of the states which is often affected by natural calamities. Tamil Nadu has fourteen coastal districts, which share 25.5 per cent of the total geographical area. With this background, this study deals with farmers perception and awareness towards as a tool for risk management in Thiruvarur District of Tamil Nadu. A multistage stratified random sampling method were followed by taking the coastal districts as the universe. Among the 14 coastal districts of Tamil Nadu, Thiruvarur district were selected based on the number of farmers cultivating Paddy crop, as paddy is the main crop in these district and most severely affected by natural calamities such as drought, cyclone and flood. The farmers raising Rabi crops will be considered for this study. The study concluded that the majority of the farmers are between 41-50 years of age group and most of the farmers are illiterates. The awareness among the farmers about crop insurance was low. The Cyclone risk faced farmers are predominant in the study area. About 40.56 percent of the sample farmers only insured their crops in case of crop loss. Nearly 60 percent of the sample farmers were using other risk management methods, like borrowing from money lender, borrowing from friends and relatives, sale of livestock was followed by others. The study suggest that to improve the awareness of the scheme were need media to know about the crop insurance scheme and proper guidance to be given for staffs and farmers for its smooth operation.

Key words : Agriculture, Crop Insurance, PMFBY, Awareness, Risk, Paddy and Coastal Area.

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Agriculture, which is an important sector of National economy, is considered widely as an industry. Agriculture in India is highly susceptible to risks like droughts and floods. India has a long coast line. Climate change is projected to cause sea-level rise, cyclone, flood, drought, with significant consequences to the coastal agro-ecology and livelihoods of farmers and fishermen. Agriculture in the coastal districts has rich agro-biodiversity as many of the coastal districts are fed by river streams, river deltas and backwater streams. These areas are not only suitable for crop production but also for fisheries and aquaculture.

Rice is the major staple crop in the coastal region, groundnut, coconut, and cashew are some of the other crops that are predominant in the coastal areas. Tamil Nadu is one of the states which is often affected by natural calamities. Tamil Nadu has fourteen coastal districts, which share 25.5 per cent of the total geographical area. Due to the high fluctuation in rainfall, Tamil Nadu farmers suffer heavy loss in the production of crops.

Crop insurance is an important instrument to give protection to farmers, to provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crops as a result of natural calamities, pest and diseases. With this background, this study deals with farmers perception and awareness towards as a tool for risk management in Thiruvarur District of Tamil Nadu. Thiruvarur district were selected based on the number of farmers cultivating Paddy crop, as paddy is the main crop in these

district and most severely affected by natural calamities such as drought, cyclone and flood. The farmers raising Rabi crops will be considered for this study. For the preparation of the paper relevant literature[1-10] has been consulted.

Objectives of the study:

1. To assess the farmers awareness about crop insurance scheme (PMFBY) in Thiruvarur district.
2. To identify the risk faced by the sample farmers in Thiruvarur district.
3. To give suggestions for improve the awareness of crop insurance scheme.

Crop insurance is an important instrument to give protection under risky activities and that plays a significant role in the agricultural production. The study will assess the Farmers perception and awareness towards Pradhan Mantri Fasal Bima Yojana scheme in Thiruvarur District of Tamil Nadu. A multistage stratified random sampling method will be followed by taking the coastal districts as the universe. Among the 14 coastal districts of Tamil Nadu, Thiruvarur district were selected based on the number of farmers cultivating Paddy crop, as paddy is the main crop in the district and most severely affected by natural calamities such as drought, cyclone and flood. From this selected district, four villages were selected based on the number of paddy farmers. 45 farmers, who are cultivating Rabi paddy crop, were selected from each of the selected villages. Totally 180 famers were selected for this study. The simple percentage analysis was used to analyse the perception and awareness of crop insurance by the farmers.

1. Socio economic characteristics of the sample farmers in Thiruvarur district :

Table-1. Socio economic characteristics of the sample farmers

S.No.	Particulars	Classification	Farmers (Numbers)	Percentage
1	Age	Below 30	33	18.33
		31-40	60	33.34
		41-50	66	36.67
		Above 50	21	11.66
2	Education	Primary level	32	17.78
		Secondary level	45	25.00
		Higher Secondary	20	11.11
		Degree	13	7.22
		Illiterates	70	38.89
3	Income level	Up to 1,00,000	54	30.00
		1,00,000 to 2,00,000	99	55.00
		More than 2,00,000	27	15.00
4	Experience in farming (years)	< 10	33	18.33
		11-20	38	21.11
		21-30	59	32.78
		>30	50	27.78
5	Family size	Small (<4)	23	12.78
		Medium (4-5)	80	44.44
		Large (>5)	77	42.78

It could be observed from the table 1 that the majority of the farmers are between 41-50 years of age group, and most of the farmers are illiterates. The three categories of income groups most of the sample farmers are in middle income group and economically strong. In case of farming experience, the most of the farmers were between 21-30 years experience in farming. The majority of the sample farmers might be nuclear family.

2. Awareness of Crop Insurance Scheme (PMFBY) in Thiruvarur District :

Table 2. Awareness of Crop Insurance Scheme (PMFBY)

S. No.	Particulars	Classification	Farmers (Numbers)	Percentage
1	Awareness level	Aware	73	40.56
		Not aware	107	59.44
3	Sources of information about the insurance	Social Media	17	23.29
		Fellow framers	15	20.55
		Agricultural Institutions	11	15.07
		Through banks	21	28.76
		NGO's	9	12.33

It could be seen from the table-2 that the awareness among the farmers about crop insurance was low. The majority of the sample farmers were aware from banks followed by social media like Newspaper, Radio, Television, and others.

3. Types of risks faced by the sample farmers :

Table-3. Types of risks faced by the sample farmers

S. No	Particulars	Farmers (Numbers)	Total
1	Drought	25	13.89
2	Flood	54	30.00
3	Cyclone	78	43.33
4	Pest and Diseases	16	8.89
5	Low yield	7	3.89
	Total	180	100.00

It could be observed from Table-3, that the Cyclone risk faced farmers accounted for 43.33 per cent in total, followed by flood risk faced farmers 30.00 per cent, Drought, Pest and Diseases and Low yield risk faced farmers with the percentage of 13.89, 8.89 and 3.89 per cent respectively. Hence it could be concluded from the table 26 that the Cyclone risk faced farmers are predominant in the study area.

4. Risk mitigation measures implemented by the Government :

Table-4. Risk mitigation measures implemented by Government

S. No	Particulars	Farmers (Numbers)	Total
1	Providing crop insurance (A)	40	22.22
2	Providing relief funds at disaster times (B)	37	20.56
3	Providing technology inputs, credit, etc… (C)	15	8.33
4	A & B	50	27.78
5	B & C	16	8.89
6	A & C	5	2.78
7	All of these (A+B+C)	17	9.44
	Total	180	100.00

It could be observed from Table 4, that in the study area, among the sample farmers 27.78 per cent are A & B, while 22.22 per cent of the sample farmers are Providing crop insurance (A). The Providing relief funds at disaster times (B) and all of these (A+B+C) are 20.56 and 9.44 per cent of the sample farmers. The B & C, Providing technology inputs, Credit, etc... (C) And A & C are 8.89, 8.33 and 2.78 per cent of the insured farmers. The results revealed that sample farmers of A & B are high followed by providing relief funds at disaster times (B).

5. Mode of risk management in case of crop loss :

Table-5. Mode of risk management in case of crop loss

S. no	Particulars	Farmers (Numbers)	Percentage
1.	Sale of livestock	18	10.00
2.	Sale of fixed assets	9	5.00
3.	Borrowing from friends and relatives	27	15.00
4.	Bank loan	5	2.78
5.	Borrowing from money lender	31	17.22
6.	Crop Insurance	73	40.56
7.	Hypothecation of house / Jewellery / Assets	17	9.44
	Total	180	100.00

It could be observed from the table 5 that 40.56 percent of the sample farmers only insured their crops in case of crop loss. Nearly 60 percent of the sample farmers were using other risk management methods, like borrowing from money lender, borrowing from friends and relatives, sale of livestock was followed by others.

The study concluded that the majority of the farmers are between 41-50 years of age group and most of the farmers are illiterates. The awareness among the farmers about crop insurance was low. The Cyclone risk faced farmers are predominant in the study area. About 40.56 percent of the sample farmers only insured their crops in case of crop loss. Nearly 60 percent of the sample farmers were using other risk management methods, like borrowing from money lender, borrowing from friends and relatives, sale of livestock was followed by others. The study suggest that to improve the Awareness of the scheme were need media to know about the crop insurance scheme and proper guidance to be given for staffs and farmers for its smooth operation.

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