

Factors Influencing Farmers To Utilize Crop Insurance Schemes In Kerala

Koshy C J^{1*}, Dr. M.P. Mahesh²

^{1*}Ph.D. Research Scholar, Department of Commerce, Annamalai University, Annamalai Nagar, Tamil Nadu, India-608002

²Professor in Commerce, Annamalai University, Annamalai Nagar, Tamil Nadu, India -608002

Abstract

Crop insurance is considered as an important risk aversion tool in agriculture. Agriculture is prone to unexpected risks that reduce farming output and it leads to financial instability to farmers. The main problems faced by farmers in agriculture are climate change, changes in input costs, labour related issues and variation in output. Crop insurance helps farmers to cover the loss in farming activities on risks associated with agriculture. Though government has provided subsidies for farmers on crop insurance, most of the farmers are reluctant to avail crop insurance. This study aims to understand the factors that have motivated farmers to avail crop insurance schemes. The results from the study indicates that there are six key factors that influence farmers that motivated them to take crop insurance such as Financial Protection and Risk Management, Awareness and Trust in Insurance, Government Schemes and Support, Compensation and Claim Process, Influence on Farming Decisions and Access to Loans and Financial Aid. While developing a crop insurance scheme and policies, government and other stakeholder should consider these factors which will influence farmers on choosing crop insurance schemes.

Keywords : Crop Insurance, Agriculture, Farmers

INTRODUCTION

Motivation is considered as the driving force that influences an individual to take action. Motivation can be internal and external which makes people to do certain actions. It is the process through which an individual attains his goal. Therefore, before making any decisions or actions, motivation is required. Lack of motivation leads an individual not to attain his specific goals. Motivation is a key factor that influences an individual while purchasing a product or services. Without motivation, people may not engage in the activity to make the purchase. Crop insurance is considered as an important risk prevention tool in agriculture. Farmers are affected economically due to the risks in agricultural. Agriculture is considered as one of the main occupation of people in India. But in India, people are moving away from agriculture due to various crisis faced in agriculture. The main problems faced by farmers in agriculture are climate change, changes in input costs, labour related issues and variation in output. In order to reduce the economic impact of risks in agriculture, the government has introduced various insurance policies. Farmers are able to reduce the impact of these risks in their crop yield by insuring the farming activities. By getting adequate compensation for these losses ensures farmers to continue farming activities.

REVIEW OF LITERATURE

Crop insurance is one of the potential management tools to reduce risks associated with due to weather conditions, plant diseases, price volatility and policy changes (Yallarawa and Prasada 2020). Mahajan (2012) has pointed out that agriculture insurance is an important tool to manage risks associated with farming. But most of the farmers are unaware about crop insurance mainly due to illiteracy. While crop insurance plays an important role in maintaining economic stability to farmers, its adoption rate remains very low mainly due to a lack of awareness, financial constraints, and skepticism towards insurance programs (Kumar et.al., 2011). Though insurance schemes are offered at subsidized rates, the enrollment rate is very low in crop insurance (Aheeyar et.al, 2023). Sundar & Ramakrishnan (2013) found that awareness level of farmers towards crop insurance schemes was very low. Instable income was the main reason that prohibits farmers from taking crop insurance. These customers prefer private insurance companies even though the price is high because of the quality of the services offered.

Suresh & Sreedaya (2022) identified the constraints faced by farmers on crop insurance. It includes delay in disbursement of crop insurance policies, improper reporting in case of losses, delay in settlement of insurance claims and inadequate publicity. Turvey et.al., (2013) found that when crop insurance are offered at a subsidized rate, the farmers are willing to purchase crop insurance. Shaik et.al., (2008) mentioned that insurance products should be developed according to areas that have unique risks and operational practices. Soni & Trivedi (2013) also found that farmers who were not familiar with crop insurance procedures are not choosing a crop insurance policy. They suggested that suggested that awareness programs should be conducted among farmers to create awareness on insurance services in association with banks. Kumbalep & Devaraju (2018) identified that risk coverage on crop insurance schemes has to be increased and should settle insurance claims within a short period. Saravanan (2013) found that the low literacy level and low awareness about crop insurance was the key factors that prevent farmers in availing crop insurance.

Farmers were also not favorable to buy crop insurance because of long claim settlement and less benefit. **Raju & Venkateshwarlu (2015)** identified that crop insurance schemes helps farmers to divert risk in farming activities and it helps in financial stability. **Selvaraj (2015)** mentioned that in order to improve farmers participation in crop insurance, government should give subsidy on premium. Customers prefer insurance products that gives more benefits and services rather than the price of the product (**Kaur et.al., 2017**). Farmers who have availed crop insurance services have a high level of risk aversion (**Yanuarti et.al., 2019**). Farmers are positively influenced to adopt crop insurance policies mainly due to their financial literacy, wealth, and experience of crop loss (**Aditya et.al., 2021**). **Sindhu & Ariff (2017)** suggests that the insurance companies should understand the farmers need and psychology, this will help to create a greater level of transparency relating to crop insurance policies. Farmer prefers crop insurance policies, if they are receiving timely payouts when there is any crop loss (**Ghosh et.al., 2021**). The factors that influence farmers decision to avail crop insurance policies are caste, farming experience, total area of farming, and availability of credit facilities (**Kumar et.al., 2021**).

RESEARCH GAP

Crop insurance is considered as a tool for farmers to reduce risks related to farming activities such as climate change, natural disasters and market fluctuations. Many studies have explored factors influencing the adoption of crop insurance mainly focusing on economic, social, and environmental factors. However it has not studied relation between the unique socio economic and agricultural conditions prevalent in Kerala. In Kerala, the agriculture activities are mostly done by small and medium level farmers who have diverse cropping patterns. Farming activities in Kerala is frequently affected by floods and other natural disasters. Though there are various crop insurance schemes offered by central and state governments, limited research has been done mainly focusing on the factors motivating farmers in Kerala to participate in these programs. Existing national or state-level studies tend to generalize findings, leaving a gap in understanding how local cultural, geographic, and economic conditions influence farmers' decisions. Addressing these research gaps will help to have a better knowledge that uniquely motivates farmers in Kerala from availing crop insurance schemes.

SCOPE AND PERIOD OF STUDY

This study aims to investigate the factors motivating farmers in Kerala to avail crop insurance schemes. The study focuses primarily on farmers in Wayanad district, which is purely agrarian economy. The region has its own unique agricultural practices and it is frequently affected to climate-related risks like floods, landslides, and droughts. Therefore, this study will provide a comprehensive understanding of the factors that influencing adoption of crop insurance. The study seeks to offer region-specific insights that can help to design crop insurance products and policies which meet the requirements of farming community in Kerala. The study was carried out from the year 2021 to 2023.

OBJECTIVES OF THE STUDY

The main purpose of this study is to identify the factors that motivate farmers to choose crop insurance policies in Kerala. The following are the specific objectives of the study:

- To identify the factors that motivates farmers to choose crop insurance policies in Kerala
- To rank the factors motivating farmers to choose crop insurance policies in Kerala

METHODOLOGY OF THE STUDY

The methodology for the study on factors motivating farmers to choose crop insurance policies in Kerala. The study will adopt a cross-sectional research design which will collect data from farmers who have availed crop insurance schemes in Wayanad district. Data is collected from farmers through structured questionnaire, which is administered to a representative sample of farmers in Wayanad district. It includes questions relating to factors that motivated farmers to avail crop insurance schemes. The sample size of the study consists of 400 samples. With 400 samples, our study will provide meaningful and statistically significant findings relating to factors that motivated farmers to avail crop insurance. This large sample helps to draw generalization about large population. Multistage random sampling is used to select participants in which the process of selecting a sample involves multiple stages for the study. Wayanad district consist of four block panchayats and two panchayats from each block have been selected for the study. Factor analysis is used in this study to identify distinct factors underlying the data and to define the variables that contribute to each factor. This method primarily involves assessing the strength and direction of factor loadings. It indicates the extent to which each variable is associated with the factors. By examining these loadings, we can gain insights into the underlying dimensions of motivation and better understand how different variables interact within these dimensions. In this research twenty-nine variables have been included to find out the factors that motivate respondents to choose crop insurance schemes. The factor analysis has grouped these 29 variables into six factors. The resulted rotated factor matrix for the attributes motivating to choose crop insurance schemes is shown in table 1.

RESULTS AND DISCUSSIONS

ATTRIBUTES MOTIVATING TO CHOOSE CROP INSURANCE SCHEMES

Crop insurance schemes play an important role in the agricultural sector. It offers farmers financial protection against the uncertainties in agriculture that affect their livelihoods. Agriculture is prone to high risks such as changes in weather, pests and market fluctuations which affects farmers financial stability. Crop insurance provides a safety net to farmers by ensuring that they can manage the impact of crop failures without falling into financial crisis. As a result, understanding the factors that motivate farmers to choose crop insurance schemes is crucial for policymakers and stakeholders in the agricultural industry. Several attributes influence farmers' decisions to adopt crop insurance, ranging from affordability and accessibility, subsidies provided by governments, scope of coverage, ease of claim processing, reputation of insurance providers awareness campaigns and recommendations from peers. These attributes along with other factors influence farmers' decisions to choose crop insurance by ensuring that they find a balance between securing their agricultural investments and managing the risks faced in farming. Taking these attributes into account, the factors motivating farmers to choose crop insurance were analyzed by using factor analysis.

FACTOR FRAME WORK

The researcher has used factor analysis to identify underlying relationships or patterns among a large set of variables by grouping them into smaller, more manageable factors. The goal of factor analysis is to reduce the complexity of data while retaining as much of the original information as possible. The researcher has identified 29 distinct variables and have been included in the study to find out the factors motivating respondents to avail crop insurance services. The resulting rotated factor matrix for the attributes motivating to avail crop insurance services is discussed as follows.

TABLE 1: Rotated Factor Matrix for the Attributes Motivating to Choose Crop Insurance Schemes

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
To prevent financial loss	0.868	0.154	0.042	0.078	0.072	-0.068
Loss experience	0.855	-0.153	0.002	0.006	0.107	0.118
Risk covered	0.840	-0.171	0.022	0.005	0.124	0.144
To reduce risk relating to farming activities	0.831	0.236	0.019	0.074	0.091	-0.094
Financial security	0.799	-0.023	0.018	0.069	0.131	0.027
Stabilized farm income	0.745	-0.048	0.075	0.069	0.060	-0.107
In case of loss, it helps to clear debt easily	0.696	-0.190	0.040	0.059	0.047	0.174
Aware about benefits of crop insurance	-0.054	0.888	0.035	0.040	-0.049	-0.052
Trust on insurance provider	0.016	0.876	0.017	-0.003	-0.031	-0.022
Publicity of crop insurance	0.051	0.868	0.005	-0.067	-0.001	0.033
Friendliness of insurance provider	-0.002	0.868	-0.031	-0.047	-0.003	0.047
Encouraged by other farmers	-0.058	0.845	0.022	0.041	-0.016	-0.070
Influence of insurance/ other officials	-0.153	0.841	0.009	-0.020	-0.035	-0.065
Government subsidy	0.009	0.060	0.719	-0.258	0.018	-0.095
Crops covered under the scheme	-0.026	0.019	0.699	-0.022	-0.229	-0.154
Insurance linked with credit	0.019	0.063	0.614	-0.464	0.086	-0.141
Procedure for availing crop insurance	0.051	-0.005	0.610	-0.084	0.238	0.155
Premium payable is very low	0.072	0.027	0.583	-0.218	0.327	-0.101
Location of service provider	0.030	-0.023	0.581	-0.167	0.059	-0.196
Support from Agriculture, Insurance, Government and other officials	0.081	-0.044	0.558	0.170	-0.002	0.243
Method of compensation determination	0.103	0.014	-0.238	0.772	0.112	0.026
Claim settlement process	0.165	-0.011	-0.149	0.689	0.364	0.034
Method of loss determination	0.094	0.030	0.094	0.643	0.011	0.272
Testing new crops in field	0.094	0.016	0.079	-0.010	0.774	-0.186
Adoption of new technology	0.161	-0.075	-0.156	0.364	0.711	0.089
Adoption of new seeds	0.230	-0.040	0.173	-0.119	0.605	0.377
Increased area under cultivation	0.175	-0.077	0.219	0.254	0.532	0.090
Comfort in loan closures during the time of unexpected losses	0.042	-0.037	-0.081	0.145	0.087	0.834
Easy to access loan	0.037	-0.067	-0.290	0.429	-0.059	0.640

Source: Computed Data

From the above table 1 it is evident that all the twenty-nine variables have been extracted and it is grouped into six factors. These factors are identified as 'Financial Protection and Risk Management', 'Awareness and Trust in Insurance', 'Government Schemes and Support', 'Compensation and Claim Process', 'Influence on Farming Decisions' and 'Access to Loans and Financial Aid'.

FACTOR 1 - FINANCIAL PROTECTION AND RISK MANAGEMENT

Financial Protection and Risk Management in crop insurance refers to the protecting farmers from financial losses caused by risks associated with farming such as climate change, pest infestations, and market volatility. Through crop insurance farmers are able to receive compensation for damaged or lost crops which ensures income stability. The variables defining Factor 1 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 2 Financial Protection and Risk Management

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	To prevent financial loss	0.868	0.795	0.831
2	Loss experience	0.855	0.780	
3	Risk covered	0.840	0.771	
4	To reduce risk relating to farming activities	0.831	0.768	
5	Financial security	0.799	0.663	
6	Stabilized farm income	0.745	0.595	
7	In case of loss, it helps to clear debt easily	0.696	0.558	

Source: Computed Data

The table 2 "Financial Protection and Risk Management" highlights the key variables that contribute to the financial security and risk management practices among respondent farmers. The variables are evaluated through **Factor Loading** and **Communality (H2)** scores, which indicate the strength and common variance of each variable in relation to the underlying factor. The highest factor loading is **0.868**, corresponds to the variable "To prevent financial loss," indicating that this is the most significant motivator for farmers in managing their financial risk. Similarly, variables like "Loss experience" (0.855) and "Risk covered" (0.840) also exhibit high factor loadings, showing that past experiences with losses and the extent of risk coverage are crucial to farmers' decision-making processes. The communality values (H2) provide insight into how much variance each variable shares with the underlying factor. For example, "To prevent financial loss" has a communality of **0.795**, implying that nearly 80% of the variance in this variable is explained by the factor, making it a strong indicator of financial protection and risk management. On the lower end, variables like "In case of loss, it helps to clear debt easily" (0.696 factor loading, 0.558 communality) still contribute to the overall factor but are slightly less impactful compared to others. Overall, the factor shows high reliability (Cronbach's Alpha of **0.831**), indicating that the variables are consistent and accurately reflect the underlying construct of financial protection and risk management.

FACTOR 2 - AWARENESS AND TRUST IN CROP INSURANCE

Awareness and Trust in Crop Insurance is an important factor that influence the farmers to choose crop insurance. Awareness consist of understanding the benefits, coverage and processes associated with crop insurance, while trust refers to the confidence farmers have in the insurance providers and the system's reliability. Farmers who are well-informed about the advantages of crop insurance and who trust the insurance providers are more likely to participate in these schemes. The variables defining Factor 2 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 3 Awareness and Trust in Crop Insurance

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	Aware about benefits of crop insurance	0.888	0.800	0.757
2	Trust on insurance provider	0.876	0.770	
3	Publicity of crop insurance	0.868	0.762	
4	Friendliness of insurance provider	0.868	0.758	
5	Encouraged by other farmers	0.845	0.725	
6	Influence of insurance/ other officials	0.841	0.736	

Source: Computed Data

The table 3 "Awareness and Trust in Crop Insurance" highlights key variables that influence farmers' awareness of and trust in crop insurance schemes. Each variable is evaluated through Factor Loading and Communality (H2), which indicate the strength and shared variance of the variables with the underlying factor of awareness and trust. The highest factor loading of 0.888 is observed for the variable "Aware about benefits of crop insurance," indicating that awareness of the advantages provided by crop insurance is the most significant contributor to the overall factor. This is followed by "Trust on insurance provider" (0.876) and "Publicity of crop insurance" (0.868), showing that trust in the provider and the level of publicity or promotion play substantial roles in building awareness and confidence in crop insurance schemes. The communality values (H2) also reinforce these findings, with the highest communality of 0.800 for the

awareness of benefits, suggesting that this variable shares a large proportion of its variance with the underlying factor. Lower, but still significant, contributions come from variables like "Encouraged by other farmers" (0.845) and "Influence of insurance/other officials" (0.841), which reflect social and external influences in shaping farmers' awareness and trust in crop insurance. Overall, with the Cronbach's Alpha of 0.757 indicating a reasonable degree of internal consistency among these variables.

FACTOR 3 - GOVERNMENT SCHEMES AND SUPPORT

Government schemes and support play a crucial role in promoting the adoption of crop insurance among farmers. Subsidies on crop insurance reduce financial difficulties of farmers and make it affordable. By providing subsidies governments help farmers to manage both investment and risk. Moreover, support from government, agricultural and insurance officials help farmers in the process of enrolment and claim settlement. The variables defining Factor 3 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 4 Government Schemes and Support

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	Government subsidy	0.719	0.596	0.803
2	Crops covered under the scheme	0.699	0.566	
3	Insurance linked with credit	0.614	0.624	
4	Procedure for availing crop insurance	0.610	0.462	
5	Premium payable is very low	0.583	0.510	
6	Location of service provider	0.581	0.409	
7	Support from Agriculture, Insurance, Government and other officials	0.558	0.408	

Source: Computed Data

The table 4 " Government Schemes and Support" highlights key variables that influence farmers' participation in crop insurance schemes, with a specific focus on government initiatives and external support. Each variable is evaluated through Factor Loading and Communality (H2), which indicate the strength and shared variance of the variables with the underlying factor. The variable "Government subsidy" shows the highest factor loading at 0.719, suggesting that subsidies play a pivotal role in encouraging farmers to participate in crop insurance schemes. The communality (H2) value of 0.596 for this variable indicates that approximately 60% of the variance is explained by the underlying factor, showing its strong contribution. Other important variables include "Crops covered under the scheme" (0.699) and "Insurance linked with credit" (0.614), which highlight the importance of comprehensive coverage and integration with credit facilities in influencing farmers' choices. On the lower end, variables like "Support from Agriculture, Insurance, Government, and other officials" (0.558 factor loading, 0.408 communality) still contribute to the overall factor, though less significantly. Despite the variation in individual contributions, the Cronbach's Alpha of 0.803 indicates that the combined set of variables forms a coherent and reliable measure of how government schemes and support mechanisms encourage farmers to adopt crop insurance.

FACTOR 4 - COMPENSATION AND CLAIM PROCESS

The Compensation and Claim Process in crop insurance is an important factor that determines how effectively farmers can recover from agricultural losses. This process involves estimating the total amount of compensation based on loss occurred in farming and ensuring that the claims are settled on time without any delay. Compensation helps farmers to have sufficient funds for farming next season. If there is any delay in claim settlement it affects their entire farming operation leading to financial constraints. The variables defining Factor 4 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 5 Compensation and Claim Process

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	Method of compensation determination	0.772	0.677	0.780
2	Claim settlement process	0.689	0.657	
3	Method of loss determination	0.643	0.506	

Source: Computed Data

The table 5 " Compensation and Claim Process" highlights key variables that influence farmers' participation in crop insurance schemes, with a specific focus on compensation received and claim process. Each variable is evaluated through Factor Loading and Communality (H2), which indicate the strength and shared variance of the variables with

the underlying factor of compensation and claim process. The variable "Method of compensation determination" has the highest factor loading of 0.772, indicating that how compensation is calculated is the most significant factor affecting the claim process. The communality (H2) value of 0.677 for this variable shows that about 68% of its variance is explained by the underlying factor, suggesting its strong contribution to the overall process. The next important variable, "Claim settlement process" (0.689 factor loading, 0.657 communality), highlights the importance of how efficiently and fairly claims are settled in influencing farmers' satisfaction with crop insurance schemes. Lastly, "Method of loss determination" has a somewhat lower factor loading of 0.643 and communality of 0.506, indicating that while it is still a significant factor, it has slightly less impact on the overall process compared to the other two variables. Nevertheless, all three variables contribute to the underlying factor with reasonable consistency, as indicated by the Cronbach's Alpha of 0.780.

FACTOR 5 - INFLUENCE ON FARMING DECISIONS

Farmers' decisions to opt for insurance coverage are shaped by various factors related to their farming practices. Factors like the introduction of new crops, technology adoption, increased area of cultivation and the use of new seeds can all play a role in increasing a farmer's perception of risk and, consequently, their likelihood to choose crop insurance. Therefore while taking a risk-intensive the farming decisions farmers will consider crop insurance as an important part of their risk management strategy. The variables defining Factor 5 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 6 Influence on Farming Decisions

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	Testing new crops in field	0.774	0.649	0.693
2	Adoption of new technology	0.711	0.702	
3	Adoption of new seeds	0.605	0.607	
4	Increased area under cultivation	0.532	0.440	

Source: Computed Data

Table 6 "Influence on Farming Decisions" highlights the key variables that affect farmers' decisions on choosing crop insurance. Each variable is evaluated through Factor Loading and Communality (H2), which indicate the strength and shared variance of the variables with the underlying factor of farming decisions. The variable "Testing new crops in field" has the highest factor loading of 0.774, suggesting that experimenting with new crops is the most significant factor influencing farming decisions. The communality (H2) value of 0.649 for this variable shows that about 65% of its variance is explained by the underlying factor, indicating its strong contribution to the decision-making process. The next important variable, "Adoption of new technology" (0.711 factor loading, 0.702 communality), highlights the role of technological advancements in shaping farmers' choices. "Adoption of new seeds" has a slightly lower factor loading of 0.605 and communality of 0.607, indicating that while it is still a significant factor, it has a slightly lower impact on the overall decision-making process compared to the first two variables. Finally, "Increased area under cultivation" shows the lowest factor loading of 0.532 and communality of 0.440, suggesting a relatively smaller influence on farming decisions. Despite these variations, all four variables contribute to the underlying factor with reasonable consistency, as reflected by the Cronbach's Alpha of 0.693.

FACTOR 6 - ACCESS TO LOANS AND FINANCIAL AID

The concept of Access to Loans and Financial Aid is closely related to farmers' ability to secure crop insurance as both mechanisms are essential for managing agricultural risks. Farmers often rely on loans to fund various farming activities. In times of unexpected losses crop insurance acts as a financial aid that helps farmers to close loans without any difficulties. The ability to secure loans comfortably, even in difficult times, ensures that farmers can continue operations without severe financial strain. The variables defining Factor 6 with their factor loading and commonality for motivating the respondent beneficiaries to avail crop insurance are given below.

TABLE 7 Access to Loans and Financial Aid

Sl. No.	Variables	Factor Loading	Communality (H2)	Cronbach's Alpha
1	Comfort in loan closures during the time of unexpected losses	0.834	0.733	0.711
2	Easy to access loan	0.640	0.688	

Source: Computed Data

Table 7 "Access to Loans and Financial Aid" presents the analysis of factors influencing farmers' access to financial resources, focusing on two key variables: comfort in loan closures during times of unexpected losses and ease of accessing loans. The table evaluates these variables using Factor Loading and Communality (H2), which help determine

their strength and shared variance with the underlying factor of access to financial aid. The variable "Comfort in loan closures during the time of unexpected losses" has the highest factor loading of 0.834, indicating that it is the most significant factor affecting farmers' access to loans and financial aid. The communality (H2) value of 0.733 for this variable suggests that approximately 73% of its variance is explained by the underlying factor, emphasizing its strong contribution. On the other hand, the variable "Easy to access loan" has a lower factor loading of 0.640 and a communality value of 0.688, indicating that although it remains a relevant factor, it has a slightly lower influence on the overall access to financial aid compared to the first variable. The Cronbach's Alpha of 0.711 reflects an acceptable level of internal consistency, suggesting that both variables together form a reliable scale for understanding access to loans and financial aid.

FACTORS MOTIVATED TO AVAIL CROP INSURANCE SERVICES

Table 8 shows the Motivating factors to Avail crop Insurance. Factor analysis of twenty nine attributes has identified six motivational factors and the results are presented below.

TABLE 8 Motivating Factors to Avail Crop Insurance

Sl. No.	Factors	Eigen Value	Percentage of Variance	Cumulative Percentage of Variance
1	Financial Protection and Risk Management	5.730	19.760	19.76
2	Awareness and Trust in Insurance	4.541	15.658	35.42
3	Government Schemes and Support	3.708	12.787	48.20
4	Compensation and Claim Process	2.246	7.747	55.95
5	Influence on Farming Decisions	1.387	4.784	60.74
6	Access to Loans and Financial Aid	1.102	3.801	64.54

Source: Computed Data

Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy : 0.824

Bartlett's Test of Sphericity: Chi-Square : 6667.478

Degrees of freedom : 406

Significance : 0.000

From the above table 8 it can be observed that the six variables have been extracted out of twenty nine attributes. These factors account for about 64.54 per cent of the variance in the data. The Eigenvalue for the first factor Financial Protection and Risk Management is 5.730. The first factor Financial Protection and Risk Management provides the maximum insights to avail the crop insurance in the study area. It is a very important factor because the respondent beneficiaries preferred crop insurance because of to get financial protection at the time of crop loss and to reduce the risks associated with farming. The second factor is Awareness and Trust in Insurance and it accounts for 15.658 per cent variance and 4.541 is the Eigenvalue. It explains that awareness regarding crop insurance is second key factor that influences farmers to prefer crop insurance schemes. Also, trust on insurance company is also an important factor that influence the farmers. The third factor is Government Schemes and Support account which accounts for 12.787 per cent variance and the Eigenvalue is 3.708. The fourth factor is Compensation and Claim Process account for 7.747 per cent variance with an Eigen value of 2.246. The fifth factor that motivates farmers to choose crop insurance is Influence on Farming Decisions which accounts for 4.784 per cent variance and Eigenvalue is 1.387. Access to Loans and Financial Aid is the sixth factor which has 3.801 per cent variance with an Eigenvalue of 1.102.

CONCLUSION

Crop insurance is considered as one of the important tool to reduce risks associated with agriculture. By insuring crops the farmers are able to cover financial constraints occurred due to crop loss. There are several factors that are influenced by farmers while choosing crop insurance. Insurance companies and government should consider these factors while developing a crop insurance policy and it ensures farmers are getting real benefits from crop insurance. From the above analysis it is evident that six key factors have important role in motivating farmers to choose crop insurance schemes. Government and other stakeholders should give more importance to these six factors as because these factors motivate the farmers to choose crop insurance policies there by helping the farmers to reduce their impact on crop loss and having financial stability.

BIBLIOGRAPHY

1. Shaik, Saleem & Coble, Keith H. & Hudson, Darren & Miller, James C. & Hanson, Terrill R. &
2. Sempier, Stephen H., 2008. "Willingness to Pay for a Potential Insurance Policy: Case Study of Trout Aquaculture," Agricultural and Resource Economics Review, Cambridge University Press, vol. 37(1), pages 41-50, April.

3. Kumar, Dr & Barah, B.C. & Ranganathan, C.R. & Venkatram, Rengan & Gurunathan, S. &
4. Thirumoorthy, S.. (2011). An Analysis of Farmers Perception and Awareness towards Crop Insurance as a Tool for Risk Management in Tamil Nadu. *Agricultural Economics Research Review*. 24.
5. Mahajan, S. S. (2012). GROWTH OF NAIS : A STUDY OF CROP INSURANCE IN INDIA.
6. BAUDDHIK 3, (1), <https://www.researchgate.net/publication/257929206>
7. Turvey, C., Gao, X., Nie, R. et al. (2013) Subjective Risks, Objective Risks and the Crop
8. Insurance Problem in Rural China. *Geneva Pap Risk Insur Issues Pract* 38, 612–633. <https://doi.org/10.1057/gpp.2012.42>
9. Soni, B. K., & Trivedi, J. (2013). Crop Insurance : An Empirical Study on Awareness and Perceptions. *GIAN JYOTI E-JOURNAL*, 3(2), 81–93.
10. Sundar, J., & Ramakrishnan, L. (2013). A Study on Farmers' Awareness , Perception and Willing To Join and Pay for Crop Insurance. *International Journal of Business and Management Invention* ISSN. 2(1), 48–54.
11. S.Saravanan. (2013). An Study Awareness Level And Farmers' Attitude About Factors of Bank Loan In Tirupur District-Tamil Nadu. *Journal Of Commerce And Management Research*, 3(1), 51–65.
12. Turvey, C., Gao, X., Nie, R. et al. (2013) Subjective Risks, Objective Risks and the Crop
13. Insurance Problem in Rural China. *Geneva Pap Risk Insur Issues Pract* 38, 612–633.
14. Raju, S., & Venkateshwarlu, K. (2015). Agricultural Insurance in India-Issues and
15. Challenges. *International Journal of Research in Finance and Marketing*, 5, 28-36.
16. Selvaraj, A. (2015). CROP INSURANCE : A STUDY WITH FARMERS ' AWARENESS AND
17. SATISFACTION. *International Journal of Current Research*, 7(07), 18680–18687.
18. Kumbalep, S., & Devaraju, M. (2018). Awareness And Perceptions Of Farmers About Crop
19. Insurance -A Study In Kolar District Of Karnataka. *International Journal of Advances in Science Engineering and Technology*, 1, 90–94.
20. Yanuarti, R., Aji, J. M. M., & Rondhi, M. (2019). Risk aversion level influence on farmer's
21. decision to participate in crop insurance: A review. *Agricultural Economics (Czech Republic)*, 65(10), 481–489. <https://doi.org/10.17221/93/2019-AGRICECON>
22. Aditya, K. S., Kishore, A., & Khan, T. (2021). Exploring farmers ' willingness to pay for crop
23. insurance products : A case of weather-based crop insurance in Punjab , India. *Agricultural*
24. *Economics Research Review* 33(2),135–146.
25. Yallarawa, Y.S.M.M.P. and Prasada, D.V.P. (2020). Demand for Crop Insurance by Tea
26. Smallholders in Badulla District: An Analysis of Willingness-To-Pay. *Tropical Agricultural Research*, 31(3): 01-10.
27. Kumar, A., Saroj, S., & Mishra, A. K. (2021). Crop Insurance and Crop Productivity.
28. *International Food Policy Research Institute (Issue January)*. Paper 01996
29. Ghosh, R. K., Gupta, S., Singh, V., & Ward, P. S. (2021). Demand for Crop Insurance in Developing Countries : New Evidence from India. 72(1), 293–320.
30. Suresh, Niranjana, and G. S. Sreedaya. 2022. "Perception of Farmers towards Crop Insurance Schemes in Kerala, India". *Asian Journal of Agricultural Extension, Economics & Sociology* 40 (11):437-47. <https://doi.org/10.9734/ajaees/2022/v40i111729>.
31. Aheeyar, M., Amarasinghe, U., Amarnath, G., & Alahacoon, N. (2023). Factors affecting willingness to adopt climate insurance among smallholder farmers in Sri Lanka. *Climate Risk Management*, 42.