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DYNAMICS OF PUBLIC-PRIVATE PARTNERSHIP IN FUNCTIONING OF CROP INSURANCE

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Abstract: Almost 60% (NITI Aayog, March 2022) of rural Indian households rely on agriculture for a living as a primary source of income. Over than half of the workforce in India works in agriculture, and we are largely relied on farmers. In contrast toward being significant to farmers' livelihood, agriculture is also important to India's economic prosperity. It is identified as a vital economic source that affects the country's overall economy. It is an accepted fact that economic planning's effectiveness depends on the expansion of the country's agricultural sector and indicates if agricultural output has reached a sustained pace, notably following the agricultural green revolution. Current years have witnessed significant financial losses as a result of crop loss, cause damage to agricultural facilities, the loss of lives and assets, etc. as a consequence of natural and man-made disasters, and damage to the environment and farmlands. All such losses have been aggravated by the monsoon's unpredictable and irregular behaviour, which has been made worse because of climate change. Crop insurance programmes offer protection to farmers against production vulnerabilities. The main characteristics are that farmers can afford the premium and are heavily subsidised. Both the government of Central and State split the share among them between actuarial premium rates and farmers' rates. While some no-loanee farmers must purchase crop insurance voluntarily for a comparable net price, all farmers who apply for a seasonal crop loan are automatically expected to be enrolled in the programme. In this article it is been established, what role Public and Private sector insurance companies have in general towards growth of the nation and region-wise contribution. Which includes the study of various elements of crop insurance plans in India and assess the consequences of Pradhan Mantra Fasal Bima Yojana (PMFBY) on farmers during Kharif & Rabi season crops. The outcomes of the insured area's forecasting for the years 2016 to 2021 showed that the level of property protection for agricultural producers would rise significantly more quickly with state subsidies covering a portion of the cost of insurance payments. Fostering growth of institutional, economical, and social stakeholder responsibility for the insurance sector.

Keywords: **Agricultural sector; Crop insurance; Crop loss; Kharif & Rabi Season Crops; Public & Private sector; Subsidies.**

I. INTRODUCTION

In order to reduce risk in agriculture, crop insurance first developed in India at the start of the 20th century. It has undergone dynamic development in terms of scope, methodology, and techniques from the time of its development until the time of execution. Insurance businesses mostly by government sector play a significant role in bringing policy into practise. Those are indeed the insurance firms who directly influence farmers, thus they will be this scheme's developing substance. The scheme and re-drafted operations support Guidelines were developed following extensive consultation with numerous stakeholders, including farmers, states, insurance firms, financial institutions, etc., it is vitally important to implement a strategy that can offer farming groups a sustainable solution for securing one 's own agricultural productivity. One such sector that is expanding across the nation is crop insurance. This is regarded as the ideal method for shifting the burden of possible disaster-related losses. Through integrating technology and data processing, farmers may manage, control, and lessen the consequences of agricultural risk by implementing crop insurance.

In recognition of the significance of the agricultural sector, the risks connected with it, and in an effort to safeguard the farming community against these consequences, the Ministry of Agriculture created a crop insurance programme in 1985. Since then, improvements have been made to the former program(s) based on the expertise attained and the perspectives of the stakeholders, States, and farming community. In 1999–2000, the National Agricultural Insurance Scheme (NAIS), which remained in place until 2015–16. The latest model on crop insurance scheme Pradhan Mantri Fasal Bima Yojana (PMFBY) has been introduced in

April 2016 to reduce the risks and uncertainties of farming and strengthen income of farmers with less premium rates for Kharif crops (2%), Rabi crops (1.5%). This scheme was developed to include more risks under crop insurance cover, to make it easier to comprehend with an updated model and affordable to the farmers. Farmers only have to pay a very small portion of the actuarial premium, which will be split equally between the State and Central Governments, in order to fully insure farmers from crop loss due to natural disasters. Unit surface area sizes differ from one state to another and from one crop to another. Depending on the accessibility of the appropriate state government, unit of coverage at will be based on a Block, a Mandal, a Taluka, a Patwarihalka, a Nyaya Panchayat, a Gram Panchayat, a Village, and furthermore. States are entitled to decide whether to include crops with high premiums.

All farmers who plant specified crops in specified locations as announced by the government of the state are entitled to get insurance. Whereas non-loanee farmers may choose to insure their crops, loanee farmers are mandated to have their harvests insured. Reasoning of the Qualifying Yield (TY) calculation method, which uses a moving average of the best five years out of seven to determine claim amounts, payment of claims before the release of the second subsidy instalment. Yield-based claims will be resolved using the subsidies based on provisional financial records.

II. Review of literature

(Punia, Kundu, et al., 2021), Agricultural insurance schemes performance in India is progressive and efforts are initiated by both public sector and Private sectors to make it commercially viable and benefitting farmers in all respect of risk coverage. (Cariappa et al., 2021), study reveals that policy intervention made for inclusive development of farmers group, the present crop insurance scheme need to be practiced and the lower framer groups are left out (77%). (Ghosh et al. 2021), the attributes that have provided with an objective of the estimation and prediction of the policy-makers in reference to the financial consequences faced by the farmers from crop-insurance. Preferences of data into the potentiality in design of the crop insurance risk management. (Tiwari, Chand, and Anjum 2020), Claims of the framers are not settled with the specified time span of 45 days as per the insurance companies policy. Private insurance companies are performed significantly and benefited, than Public sector insurance companies performance and need for the promotional activities for strengthening the pooling the premium collection. (Singh and Agrawal 2020), an important policy risk management instrument, agriculture insurance is out of the price range of bulk of farm owners in the nation. Farmers did not benefit from agriculture insurance by receiving enough and the right as claims anticipated due to crop failure under newly introduced agriculture insurance plans under Public Private Partnership, which pertaining in the context of private insurers produced greater revenue by mitigating agricultural risks. Unfortunately, private agriculture insurance businesses profited from farmers' losses. (Iyer Anusha et al., 2018) Researchers identify the functioning challenges which where been faced by the Pradahan Mantri Fasal Bima Yojana due its limited role and backend functioning and a gap between the insurance companies and insured. (Raju & Chand, 2008), Agricultural insurances practices has to be improved with a supportive design mechanism in variability evaluation of the schemes. Integration of the farmer’s communities and suggesting the financial implication upon the non-coverage and popularising the crop insurance through crop insurance companies.

III. Objectives of the study

With reference to the performance of the Public & Private Sector Insurance companies towards Crop Insurance on focused two areas,

1. To analyse the relationship between agricultural lands covered and the farmers' application received.
2. To analyse the relationship between claims made and claims paid.

IV. Need and scope of the study

Continuous losses with regard to receive payments and premiums received has little effect from insurance schemes and have negatively impacted the financial results of agriculture insurance schemes. The scope of the study has been limited only to analyse and evaluate the performance of public sector and private sector in catering to the farmers need towards crop insurance risk coverage and the insured and claim paid.

V. Materials and methodology

The comprehensive implementation of the process at mapping of the collected secondary data published by Government of India, Ministry of Agriculture and Farmers Welfare, Center for Management in Agriculture, Indian Institute of Management Ahmedabad (IIMA), for a period of five years from 2016 to 2021, in view of scientific development and direction. In evaluating the performance of the Public & Private sector Insurance companies towards crop insurance through Pradhan Mantri Fasal Bima Yojana Regression analysis of cumulative data to evaluate and establish the relationship develop a model.

VI. Results/analysis

The crop insurance schemes cover programme was accepted by 27 States and Union Territories with all seasons. In the initial year of the programme (2016–17), 30% of the gross cropped area was covered. The level of coverage was the highest in India's history of crop insurance. In addition, when compared to previous programmes, non-loanee farmer involvement has expanded greatly, reaching 37% of the program's overall coverage in 2019–20. This is a significant Scheme accomplishment. Additional coverage methods for Non-loanees were established to help with this.

Table 1: Statement showing the crop insurance coverage and claims, from 2016 to 2021 by PMFBY

Period	Farmers Applications Insured (Lakhs)	Area Insured (Lakhs Ha)	Sum Insured (₹.Crore)	Farmer Share in premium (₹. Crore)	Gross Premium (₹. Crore)	Reported Claims (₹. Crore)	Paid Claims (₹. Crore)	Farmers applications Benefitted (Lakhs)
2016-17	583.7	567.3	2,01,279	4,047	21,770	16,773	16,758	156.3
2017-18	533	508.3	2,02,265	4,203	24,649	22,177	22,113	170.4
2018-19	576.2	523	2,30,060	4,853	29,348	28,640	27,491	217
2019-20	608.8	494.8	2,17,510	4,388	31,709	25,409	20,943	181.4
2020-21	398.1	261.2	1,02,926	2,423	19,047	15	15	0.2
Total	2699.8	2354.6	9,54,041	19,913	1,26,521	92,954	87,320	725.3

Sources: Ministry of Agriculture and Farmers Welfare (Department of Agriculture and Farmers Welfare) August 2021

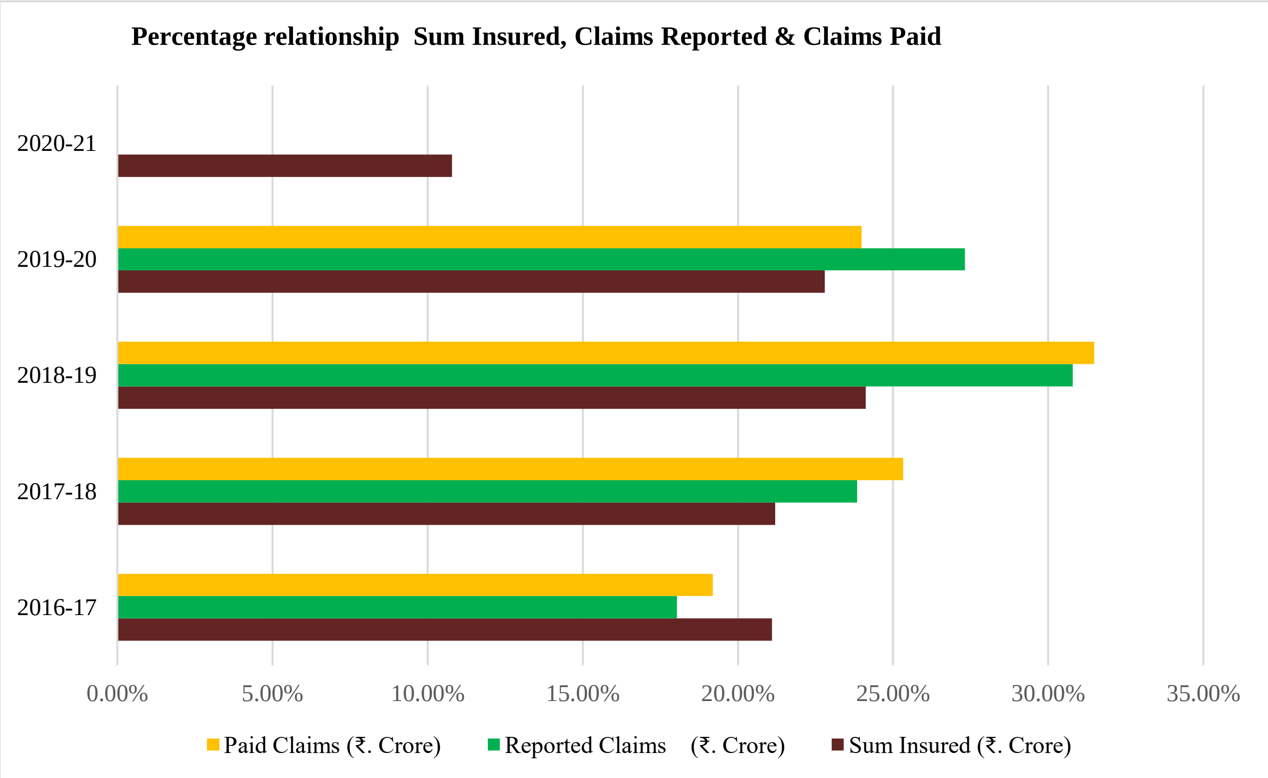
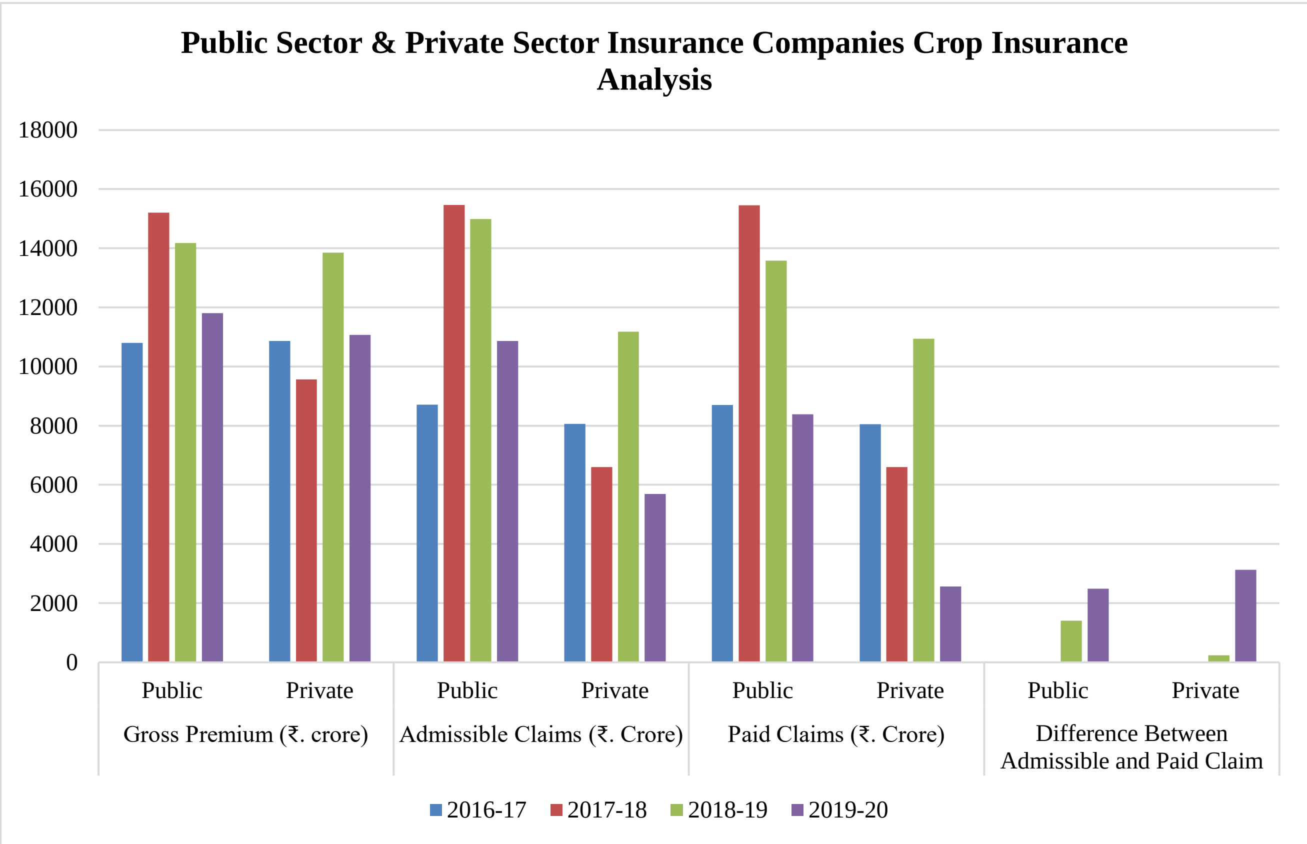


Figure 1: Percentage of Sum insured, Reported Claims and Paid Claims under PMFBY

Based Table 1 on participation of farmers covered, the area protected, claims disbursed, and the aggregate farmers benefited, agricultural protection through PMFBY remained low. The subscriber and premium on claim percentages were considerably lower in the PMFBY compared to other schemes. The findings of the multiple regression results suggest that while subsidies had no significant impact on farmers' insurance participation, the premiums paid by farmers have a substantial contribution to the number of farmers protected over time. The main shortcomings of the PMFBY include delays in settling claims, the nature of the system, and farmers' lack of knowledge. Increased use of online communication could assist in educating farmers about these programmes.

Table 2: Statement Showing the Public Sector and Private Sector Insurance Companies participation in Crop Insurance Schemes during 2016 to 2021.

Year	Gross Premium (₹. crore)		Admissible Claims (₹. Crore)		Paid Claims (₹. Crore)		Difference Between Admissible and Paid Claim	
	Public	Private	Public	Private	Public	Private	Public	Private
2016-17	10,800.59	10,861.88	8,712.88	8,057.3	8,698.1	8,052.58	14.78	4.72
2017-18	15,201.64	9,566.7	15,458.86	6,600.4	15,453.51	6,599.19	5.35	1.21
2018-19	14,173.69	13,854.67	14,982.98	1,11,82.56	13,580.99	10,944.65	1,401.99	237.91
2019-20	11,805.37	11,066.19	10,868.05	5,693.05	8,382.92	2,564.54	2,485.13	3,128.51
Grand Total	51,981.29	45,349.44	50,022.77	31,533.31	46,115.52	28,160.96	3,907.25	3,372.35



Sources: Ministry of Agriculture and Farmers Welfare, (Department of Agriculture and Farmers Welfare) August 2021.
Figure 2: Shows the Performance of the Public Sector and Private Sectors insurance companies in relation to crop insurance for the period of 2016 to 2020 under PMFBY.

Table 2 indicates that there has been a narrowing and indication of a dispersion in the results on the pay-out of claims as well as the revenue generated by private insurance firms over a four-year period between the gross premium and claims paid. Even though the benefits were substantial According to Table 1 and Figure 1, over the course of three years, the number of covered farmers fell by 18%, and also the total land area insured fell by 13%. The overall area insured has reduced by almost 19%, while the number of farmers with insurance has decreased by another 6%. Despite the fact that the amount of gross premiums has significantly increased by 11%. Private insurers' attitudes on this would be highly favourable because it shows the collection of premiums surpasses claims. This could be a positive development.

VII. DISCUSSION

Promotion of the agricultural component within the nation's economy is one of them, as there is an increase in farmers' participation in crop risk management thanks to government assistance for agricultural insurance schemes, structural reforms, and industry consolidation aimed at enhancing the insurance sector's capacity to offer the agricultural sector within the economy of high-quality services. Through the data analysis it has been evaluated that the land coverage and the application received has no correlation which is negative, which establishes participation of farmers varies with no relevance to the data. Claim made by the farmers do not support the clear evidence for the fulfilment of mentioned reason for non-acceptance.

VIII. CONCLUSION

The scope of the study is not limited only to evaluate the claims, thus, further scope for the study to evaluate the system functioning of the public and private sectors partnership under crop insurance scheme as such withdrawal by the private sector's insurance companies from the program. Scope for establishing relationships between the type of crop and risk coverage, claim settlements, and type of farmers. The good and balanced outcomes of public-private partnerships demonstrate the necessity for further creation of a reliable and efficient crop insurance system well within scope of a private-public partnership model. Farmers are discouraged from requesting crop insurance due to the process's difficulty, unwarranted claim settlement delays, and governmental inefficiencies. It can be decided that a set of guiding principles should serve as the foundation for the insurance system's development strategy. This calls for increased government efforts in terms of creating suitable structures and giving the farm insurance programme financial support. Comparable assistance for private sector insurers would eventually help to improve the profitability of insurance programmes and expand insurance coverage.

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