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Review Paper

A Critical Appraisal of Pradhan Mantri Fasal Bima Yojana

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ABSTRACT

India is home to nearly 24 million populations where nutritional food could not be made available. There are various regional problems e.g. some specific virus or pest attack or some disease hits only some small areas or if not pet animals like nilgaya destroys crop of a certain specific field. For this every farmer needs to be insured. Many governments of the world stated an idea called GROUP INSURANCE. On these grounds government of India started the most ambitious program in 2016 named as Pradhan Mantri Fasal Bima Yojana (PMFBY). The programme covers all crops, farmers and region so that each crop could be insured by the farmers and loss of any type could be covered. The programme began with a bang with nearly 587 lakh farmers. It was expected that at such low premiums (1.5% for Rabi crops, 2.1% for kharif crops and 5% for horticulture crops) each farmer will get insured. But the number of farmers and crop insurance has decreased over time. The present paper attempts to study the conceptual framework of the scheme and focuses on implementation problems faced by it. Part 1 of the paper deals with Research Problem and review of literature. Methodology is discussed in Part 2. Part 3 is devoted to testing of hypothesis and finally part 4 is devoted to findings and recommendations. Finally the study suggests that the better advantage can be achieved if the barriers like digital illiteracy, unawareness among the farmers regarding scheme could be overcome. Also proper mechanism should be followed so that states find the schemes profitable for them as well and to avoid the high percentage of profit share to private insurance company as the main focus of the scheme is to benefit farmers.

Introduction

India is known as an agrarian economy although share of agriculture and its allied services is as low as 19.9% whereas population dependent on agriculture for livelihood is as high as approx. 58% of total population. Agriculture sector of India is facing various problems such as excess employment burden, crop failure, and non- remunerative prices for quite long so much so that most surveys conducted by government and non-government agencies point out that nearly 60% of total farmers want to quit agriculture. In last decade more than 2 lakh farmers have committed suicide despite various government policies of price stability like Direct benefit transfer, Kisan Samman Nidhi, Indira Awas Yojana and others. Many insurance schemes had also begun for farmers such as 'Comprehensive Crop Insurance Scheme', 'Rashtriya Krishi bima Yojana', 'National Agriculture Insurance Scheme' and 'Pradhan Mantri Fasal bima Yojana' in addition to national disaster relief fund. Since 2001 farmers are facing more and more natural disaster and they are likely to enhance because of global warming.

Climate and atmosphere are public goods and no single country can control them. India alone has faced severe cyclones like Fani, Maha, Kyarr, Amphan, Nisarga, Yass, and Tauktae to name a few. In last two years 2019- 2021. India faced five cyclones besides other natural disaster at national and local level. These disasters impact economy in many ways such as destruction of infrastructure, houses but generally they impact the farmers due to excessive flooding, unseasonal rainfall, drought and famines. The greater danger that has occurred presently is that in earlier years most hurricanes took place in Bay of Bengal and affected the coastal area of Odisha, Bengal etc but in recent years due to global warming Arabian sea is getting hotter and hurricanes have started flowing from Arabian Sea impacting much wider range of cultivable land of India. The recent analysis from world metrological organisation rising earth temperature by 1° would mean less of agricultural productivity by at least 2% and total production of Indian agriculture by 7%. National Disaster Fund has been created by India but it can help individual farmers or local level pre-and past harvest losses. Government of India has launched a very ambitious Pradhan Mantri Fasal Bima Yojana.

Pradhan Mantri Fasal Bima Yojana (PMFBY) was implemented to remove the various strategic and implementation problems of earlier insurance schemes especially for (1) greater inclusion of farmers, (2) Add new kind of bills which were not included in earlier insurance such as hailstorm, Locust attack at local level, (3) it also ensured higher sum assurance and (4) to use new kind of crop cutting measures to arrive at the value of loss. One must remember that not only in India but everywhere in the world crop insurance scheme has proved to be a failure. But new methods of crop insurance are being undertaken. In PMFBY 15 non-life insurance companies (11 of private sector in 4 of public sector) were approved by IRDA for agriculture insurance. In fact the most important problem of crop insurance scheme is how to differentiate between disaster relief and insurance. Insurance is a commercial business while disaster relief is of social relevance. It is assumed that disaster relief is for small and marginal farmers but in India almost 80% farming is in the hands of such people. Moreover natural disasters can be at large level (drought, flood) as well as localised level so disaster relief which has a social relevance but in Indian context also has a commercial interest. In case of commercial interest individuals need to ensure themselves but then in agribusiness because of high risk, premium would be high and thus universal coverage is certainly better. Moreover with scientific advancement the valuation of crops differ on yearly basis. This does not allow single rate of premiums. PMFBY thus is an insurance (subsidised) scheme where state and central government pay more than 98% of premium which they would otherwise could have used for natural disasters but not could be utilised for universal insurance. More and more farmers could be benefited as individual farmers may not be aware of the advantages of Agro Insurance. But one must remember that disaster relief is an emergency in nature while subsidy for insurance is recurring in nature and may add to fiscal unsustainability. The government has of course reduced some subsidy cost paid to petroleum sector but insurance subsidy would go on rising as number of farmers, crops and yield value rises. At present government share in premiums both Rabi and kharif are nearly 50,000 crores while only 30% farmers and 35% area under crop insured. Many state governments are opting out of PMFBY. Now one can find out the growth of PMFBY and evaluate although only five years have been completed of this Yojana.

The significance of the research is to find out the importance of PMFBY keeping in view the objective of kisan welfare in India. Also it tries to find out the cause and factors that hinders the growth of the scheme so that proper measures could be taken to overcome the difficulties and make the scheme effective and popular among the farmers.

In this research paper the researcher analyzed the importance of PMFBY in removing the problems of farmers of India especially from local and national level disasters. The main objectives of the research paper are;

- PMFBY has completed five years of its operation that in January 2021. How has this Yojana been performing in comparison to earlier insurance schemes of India?
- The participation of farmers in PMFBY has not been very encouraging although it has increased from the Past. The researcher would like to analyse the reason for non-participation in this scheme.
- Many states are moving out of the scheme and starting their own plan. This research paper will try to focus on the problems as to why state governments are not adopting this scheme.
- For the first time many private insurance companies have been included in universal insurance scheme. This paper would analyse their functioning and lastly
- This paper would suggest any changes if required in this scheme to make it more successful.

Review of Literature

S.K.Jamanal, K.V. Natikar and S.V.Halakatti (2019), A Study on farmer's knowledge about crop insurance schemes in Northern Karnataka, discussed about the affect of knowledge and awareness about the insurance schemes amongst the farmers. Karnataka being one of the literate states, study shows a low level of knowledge among the farmers about the benefit of various insurance schemes. To conduct the study purposive sampling method was used. For data analysis descriptive statistics and multiple linear regression models were used.

Rajiv Kumar Ghosh (2019), "Performance evaluation of Pradhan Mantri Fasal Bima Yojana" has analysed the implementation and working mechanism of the scheme in different states of the country with different agricultural farming patterns. The researcher tried to find out the hurdles faced by the farmers as well as implementing agencies at different levels and in the governance of PMFBY. The researcher recommended that the basic problem faced by farmers is lack of awareness and hence efforts are required to spread awareness amongst them. This can be done by the help of active involvement of village panchayats.

Jose, Josheena (2016), "A study on the impact of agricultural insurance on risk management among food crop farmers in Kerala", the main focus of this study is to evaluate the strategy of farmers for risk management focusing on the state of Kerala. The study reveals that the problem of major part of farmers' population is same that as a financial crisis faced by them due to crop failure. As a result of which they are forced to ask for financial assistance from lenders, which is an easy option for them or they can go for loans from banks.

Shweta Sinha and Nitin Kumar Tripathi (2014), Assessment of crop insurance international practices, policies and technologies as risk mitigation tools in India and Thailand, International Journal of Advanced Research has revealed that the countries were in diverse stage of adapting index based crop insurance with different stages of government support. This study analyses crop insurance based on geographical areas and climatic conditions but does not analyse farmer's need of insurance for credit and other market based requirement.

Singh Sukhpal, kaur Manjeet, H.S.Kingra (2009), conducted a study to find out the reasons behind the inadequacies of institutional agricultural credit system in Punjab. This study shows that flow of agricultural credit is inadequate both quantity and quality wise the major occupation of Punjab is agricultural farming. But we can see a huge division among the farmers within Punjab. The difference between farmers with large landholdings and that with small landholdings is quite visible.

P.Hazel(1986); A model For evaluating farmers demand for insurance: application in Mexico and Panama, has discussed the problem of insurance from the side of farmers and concluded that like any other merit it's evaluation is difficult. It's a region specific study often underdeveloped country.

Methodology

As per the requirement of the paper the study is based on secondary data from Department of agriculture, cooperation and farmers welfare government of India and private insurance agencies involved in PMFBY. The study is descriptive and analytical and statistical tools are used for better comprehension.

Limitations

Only five years have passed of implementation of PMFBY Yojana. Moreover last two years and three crops have been partially impacted by COVID-19. The period of evaluation is very small and all recommendations are purely indicative.

Hypotheses: Following Hypotheses are tested by the researcher:

Hypothesis 1

H0: The enrolment of farmers has significantly increased in PMFBY since its inception. H1: The enrolment of farmers has not significantly increased in PMFBY since its inception.

Table 1: Farmers Application and Farmers Application Benefitted

Year	Farmers Application (lakh)	Farmers Application Benefitted
2016-17	583.7	156.4
2017-18	533	170.4
2018-19	576.8	220.5
2019-20	422	184.9

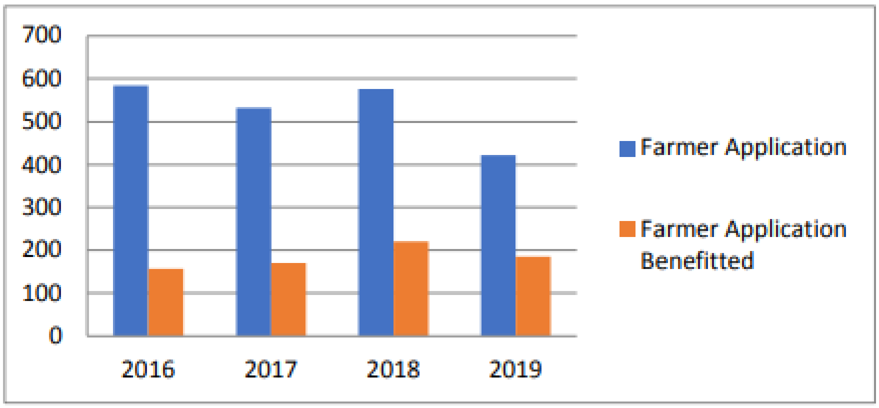

Fig 1: Farmers Application and Farmers Benefitted

t-Test: Two-Sample Assuming Equal Variances

	583.7	*156.4*
Mean	510.6	191.9333
Variance	6367.08	664.6033
Observations	4	4
t Stat	6.582148	
P(T<=t) one-tail	0.001379	
t Critical one-tail	2.131847	

Looking at the table and graph as well as the result of the test it is quite clear that null hypothesis is rejected and alternate is selected. That is there has not been any significant rise in the number of insured farmers. It is true that in some states insurance has gained significant number but overall the increase is almost negligible although governments are paying 98% of the premium. This number may fall more because since 2020 there is no forced enrolment. Earlier those who had taken loan of any kind from any bank had to compulsorily enroll and the premium installment was added to their loan. As this condition has been taken away by the government there is every chance of reduction in enrolment. There are various causes of lack of interest in enrolment. This scheme is area-based so many farmers especially big do not feel comfortable because they apply larger inputs yet the sum assured is same and is nearly 40% of the expected yield i.e. the farmers do not get paid by full reward they expect they get in fact equal to their investment. Small farmers find very difficult to upload the registration form due to unavailability of Internet and information about the app. In tribal areas it's almost impossible to download and upload the form. Most of the small farmers do not even have smartphones/ laptops. There is lack of awareness of advantages of the scheme too. The insurance people and government agencies attitude also does not help.

Hypothesis 2

H0: The claim settlement ratio in PMFBY has significantly improved with the private insurance companies' Partnership.

H1: The claim settlement ratio in PMFBY has not significantly improved despite the participation of private insurance companies.

Table 2: Reported Claims & Paid Claims

Year	Reported Claims	Paid Claims
2016-17	16773	16759
2017-18	22118	22114
2018-19	28941	28004

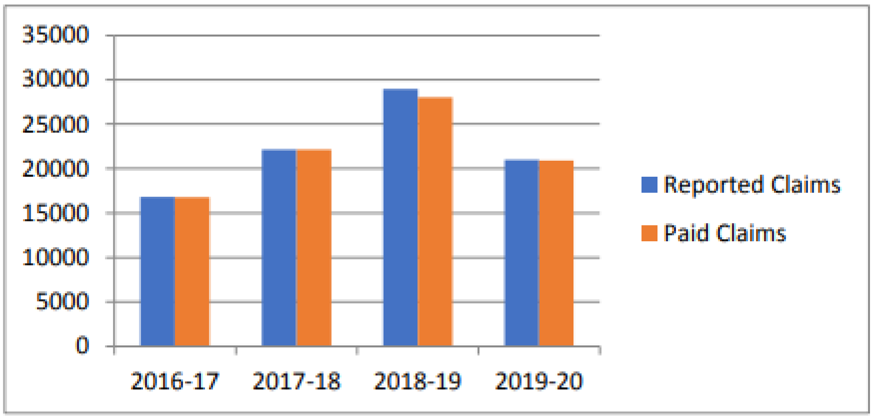

Fig 2: Reported Claims & Paid Claims

Test: Two-Sample Assuming Equal Variances

	16773	*16759*
Mean	24011.33	23675.67
Variance	18552822	14413858
Observations	4	4
t Stat	0.101258	
P(T<=t) one-tail	0.462109	
t Critical one-tail	2.131847	

As per above analysis null hypothesis is selected and alternate is rejected although the time is to list to evaluate the performance of private insurance companies but the data suggest that settlement of claims has been very satisfactory. Newspaper reports confirm these facts moreover despite the allegations and counter allegations of government agencies lekhpals, B.D.O and insurance agents that the insurance companies do not help and cooperate in settlement yet the settlement ratio is around 98% which is quite satisfactory.

But this data is provided by insurance companies and hence they are neither foolproof nor trustworthy. There are delays in settlement and often claims are registered on preliminary grounds only which is proved by the fact that till date all insurance companies have been successful in generating lot of profit as the actual claims provided have been less than 3% of total registrations this is verified by the annual reports of insurance companies but in the year of distress death claims could be more than twice the earning of the insurance companies. The monsoon has been quite normal in all years of PMFBY. The real test would arise only when there would be great climatic dislocation.

Findings and Recommendations

It's true that insurance is a personal choice based upon the nature of the person and probability and severity of loss versus premium. Yet understanding the nature and attitude of farmers group or compulsory license in India is an automatic choice. Government of India has been trying various policies and plans to enhance the coverage of insurance among Indian farmers. PMFB Yojana is the latest addition of the policy with most of the premium 95 to 98.5% paid by the government. It was supposed that it will lead to universal coverage but data of last five years suggest that only 35% farmers at the most have involved in it and this number may not remain intact often the freedom given to farmers that may or may not enroll if they have already taken loans as most of them 80% were those who had taken loan from the banks or government agencies.

Many states opted of the scheme. The variety of reasons has been cited by various states to opt out of the scheme. Earlier it was assumed that non B.J.P. lead government opted out of the scheme because they have to pay large part of total premium i.e. equal to central government but the credit goes to P.M.. But in 2020-21 even Gujarat opted out of the scheme citing high premium demands by insurance companies for insurance. Gujarat's chief minister believed that they can negotiate better deals with insurance companies and will have to pay lesser premium and can get better coverage. In fact this statement may not be true but one fact that remains is why different states need to come under one umbrella. Agriculture is a state subject and centre is invading the entire areas of state subject which is against the policy of co-operative federalism. The centre reduces the grant of states by paying for such schemes which states themselves can run in better ways. Moreover insurance premium depends upon the amount of risk and money. States like Kerala may face larger risks of natural disasters but does not face the risk of droughts and famines if analysed in historical perspective. It prefers National Disaster Management Funds to manage rather than to participate in PMFBY. Another important aspect of states opting out of the scheme could be that according to latest central government guidelines regarding share in premiums, the central government has capped its premium subsidy at 30% in un-irrigated areas and 25% in irrigated areas. This has pushed the burden of running scheme more towards the state government.

Conclusion

Based upon these findings one may see that the PMFBY has not attained the level of expected success. There are many reasons for that one is politics. The Centre announces this policy as PMFBY while states have to fund it. The competitive populism does not allow the opposition states to implement the policy. Moreover Government of India under Digital India scheme has made registration on online mode. In Indian context there are problems of digital illiteracy, unavailability of smartphones, internet connectivity is and will remain serious problem for PMFBY. Therefore it is highly recommended that (1) non-digital registration should be done (2) greater awareness among farmers needs to be created about the benefits (3) politics and competitive populism shall be avoided as far as possible and finally the sum assured shall be based on actual production rather than on as assured by crop cutting experiments.

India being an agrarian economy deals with lots of risky aspect of agriculture. Hence an efficient crop insurance scheme becomes essential for compensation various losses of farmers due to natural and man-made disaster and also for financing the inputs involved in agricultural production. For better implementation of current running crop insurance scheme i.e. PMFBY a long term optimistic vision is required to remove the adhocism. The study above reveals that undoubtedly the scheme is better than earlier ones but lack of awareness and not so good implementation mechanism is causing benefits to the private stakeholders than the farmers who are the actual victims of the risk involved in agriculture. Hence proper implementation can give us some desirable results which will be beneficial for farmers as well as states involved.

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