



Performance of Different Agencies under Pradhan Mantri Fasal Bima Yojana in Madhya Pradesh

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ABSTRACT

India has suffered crop losses almost every year either due to extreme weather phenomena. Crop insurance is one alternative available to mitigate yield risk by the farmers. The Government of India has recently approved Pradhan Mantri Fasal Bima Yojana (PMFBY) at heavily subsidized rates of premium. Three insurance agencies i.e. ICICI Lombard General Insurance Company Limited., Agriculture Insurance Company of India Limited (AIC) and HDFC ERGO General Insurance Company Limited were working in 31, 10 and 10 districts respectively for crop insurance in the state of Madhya Pradesh respectively. It was found that out of total cultivators (101.15 lakhs) in the state, the 61.55, 21.35 and 17.10 percent were found to be covered under AIC, HDFC and ICICI Lombard insurance agencies respectively, while out of total insured farmers (61.42 lakhs), 92.08 (90.31 and 1.77), 56.69 (51.84 and 4.85) and 47.25 (40.95 and 6.30) percent were found to be insured (LI and LNI) under ICICI, AIC, and HDFC, respectively and benefited farmers were found to be maximum in HDFC (15.35 percent) followed by AIC (6.99 percent) and ICICI (5.35 percent).

Keywords

Crop insurance, fasal bima, PMFBY, stake holder.

JEL Codes

G22, D80, D81, D82.

INTRODUCTION

India is one of the most disaster-prone countries in the world owing to its diverse climatic conditions. Since the last decade, India has suffered crop losses almost every year either due to flood or drought or frost/extreme temperatures. Agriculture is the mainstay of the rural economy in India and largely carried out by small and marginal farmers who have limited or no access to institutional credit, high dependence on rainfall and a large chunk of them practice subsistence farming. Increasing incidence of farmers' suicides due to successive crop failures because of weather fluctuations had alerted the policymakers to take crop insurance seriously in India, (Govindaraj, Singh, Argal & Tyagi, 2016). There were many cases of farmers' suicide on account of crop loss and it was truly challenging for any Government to control such unfortunate incidences unless they had a formal mechanism to mitigate the agricultural risk. A crop insurance scheme was effective when implemented with the right spirit and covered all farmers with an optimum claims paid to the right person at a right time (Rajaram & Chetana, 2016)

The crop insurance is one alternative available to reduce the risk of yield loss by the farmers. It is a potent mechanism to reduce the overall impact of income loss on the farmer (family and farming). Thus, it is a means of protecting farmers against the probable variations in their yield, resulting from uncertainty of practically all-natural factors beyond their control such as rainfall (drought or excess rainfall), flood, hails, other weather variables like (temperature, sunlight, wind), the pest infestation, etc. It is a financial tool to minimize the impact of loss in farm income by factoring in a large number of uncertainties which affect the crop yields of the farmers. As such it is a risk management alternative process, where the production risk element is transferred to another party at a cost, called the premium. To design and implement an appropriate insurance programme for agriculture is, therefore, a very complex process and a challenging task. There are two approaches to crop insurance, namely, the individual approach method, where yield loss on individual farms forms the basis for indemnity payment, and the homogeneous area approach method, where a homogeneous crop area was taken as a unit for assessment

of yield and the payment of indemnity. In fact, in the cases, the reliable and the dependable yield data for the past 8-10 years are needed for fixing premium on an actuarially sound basis. (Nayak, 2016; Pradeepika, 2017)

The Government of India recently approved Pradhan Mantri Fasal Bima Yojana (PMFBY) which would replace the existing schemes of the National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS) from *Kharif* 2016. PMFBY would be available to the farmers at very low rates of premium which would be maximum up to 1.5, 2.0, up to 5.00 percent for *rabi-kharif* for food crops, pulses and oilseeds and annual horticulture/commercial crops, respectively. This scheme would provide insurance cover for all stages of the crop cycle including post-harvest risks in specified instances. The scheme was implemented in all the states of the country. How well the Scheme is being implemented by the implementing agencies and how well is the crop notification, information flows and disbursements of the scheme in Madhya Pradesh are the parameters of the intended study hence this study was undertaken in Madhya Pradesh.

METHODOLOGY

The three insurance agencies ICICI Lombard General Insurance Company Limited (ICICI), Agriculture Insurance Company of India Limited (AIC) and HDFC ERGO General Insurance Company Limited (HDFC) were found to be working in 31, 10 and 10 districts, respectively for crop insurance in the State. The study was based on secondary data. The secondary data on the number of loanee and non-loanee farmers insured, the total sum insured and total benefited farmers from PMFBY in different districts of Madhya Pradesh were collected in the period of 2016-17 from the office of the ICICI, AIC and HDFC, Bhopal. Descriptive statistics were employed to analyse the data.

RESULTS AND DISCUSSION

Farmers Insured under PMFBY

The number of farmers insured during *Kharif* and *Rabi* season across Loanee Insured (LI), non-loanee insured (NLI) and total insured (TI) among different agencies under PMFBY is presented in Table 1. The results showed that the total number of farmers insured under PMFBY in the state during both the seasons was found to be 6141799, out of which 92.37 and 7.33 percent were found to be LI and NLI, respectively. Out of TI farmers, 60.88 percent insured their crops during *kharif* and 39.12 percent during the *rabi* season. Out of total farmers insured during *kharif* (37.39 lakhs) and *Rabi* season (24.03 lakhs), 89.81 and 96.36 percent were found to be LI. out of LI (56.74 lakhs) and NLI (4.68 lakhs) farmers, 59.19 and 81.35 percent insured their crops during *kharif* and 40.81 and 18.65 percent during *Rabi* season, respectively. The results revealed that only 7.63 percent NLI farmers used to insured their crops in both the seasons which were found to be more in *kharif* (10.19 percent) as compared to *Rabi* (3.64 percent). It seemed

that due to erratic monsoon, raising crops during *Kharif* was riskier as compared to *Rabi* season.

Out of LI, NLI and TI farmers insured, 56.88, 64.43 and 57.46, 15.29, 29.03 and 16.61 and 27.53, 6.54 and 25.93 percent were found to be covered under AIC, HDFC and ICICI in LI, NLI, and TI categories, respectively. It was found that due to the maximum area (31 districts) was covered by AIC; therefore, the percentage LI, NLI, and TI was found to be lower as compared to HDFC and ICICI while loanee farmers (27.53 percent) and NL (29.03 percent) were found to be highest ICICI and HDFC. Out of total loanee, non-loanee and TI under AIC 65.80, 88.07 and 67.71 percent farmers

Table 1. Number of farmers insured in different seasons by different agencies under PMFBY in Madhya Pradesh, 2016-17

Particulars	Agencies	No. of farmers insured		
		Loanee	Non-loanee	Total insured
Kharif	AIC	2123509 (65.80)	265812 (88.07)	2389321 (67.71)
	HDFC	429129 (48.53)	94019 (69.13)	523148 (51.27)
	ICICI	805176 (51.55)	21244 (63.39)	826420 (51.89)
	Total Kharif	3357814 (59.19) [89.81]	381075 (81.35) [10.19]	3738889 (60.88) [100.00]
Rabi	AIC	1103568 [34.20]	36023 (11.93)	1139591 (32.29)
	HDFC	455215 (51.47)	41990 (30.87)	497205 (48.37)
	ICICI	756742 (48.45)	9372 (30.61)	766114 (48.11)
	Total Rabi	2315525 (40.81) [96.36]	87385 (18.65) [3.64]	2402910 (39.12) [100.00]
Total	AIC	3227077 (56.88)	301835 (64.43)	3528912 (57.46)
	HDFC	884344 (15.59)	136009 (29.03)	1020353 (16.61)
	ICICI	1561918 (27.53)	30616 (6.54)	1592534 (25.93)
	Total MP	5673339 (100.00) [92.37]	468460 (100.00) [7.63]	6141799 (100) [100.00]

Figures in parentheses () are percentage to Madhya Pradesh.
Figures in [] are percentage to the total.

were found to be covered during *kharif* and 34.20, 11.93 and 32.29 percent during *Rabi* season respectively, while in case of HDFC, ICICI approximately 50, 65 and 52 percent during *Kharif* and 50, 31 and 48 percent during *Rabi* season, respectively in LI, NLI and TI categories. This showed that in relative turn HDFC and ICICI used to *Rabi* season for the insurance prefer as compared to AIC and relatively NLI were found to be more in case of HDFC and ICICI as compare to AIC particularly in *Rabi*

Table 2. Benefited farmers to total insured farmers during the different season by different agencies in Madhya Pradesh, 2016-17

Particulars	Agencies	No. of farmers insured	
		Benefited	Total insured
<i>Kharif</i>	AIC	404797 (93.01) [16.94]	2389321 (67.71) [100.00]
	HDFC	331427 (100.00) [63.35]	523148 (51.27) [100.00]
	ICICI	92509 (100.00) [11.19]	826420 (51.89) [100.00]
	Total <i>Kharif</i>	828733 (96.46) [22.17]	3738889 (60.88) [100.00]
<i>Rabi</i>	AIC	30444 (6.99) [2.67]	1139591 (32.29) [100.00]
	HDFC	-	497205 (48.37) [100.00]
	ICICI	-	766114 (48.11) [100.00]
	Total <i>Rabi</i>	30444 (3.54) [1.27]	2402910 (39.12) [100.00]
Total	AIC	435241 (50.66) [12.33]	3528912 (57.46) [100.00]
	HDFC	331427 (38.57) [32.48]	1020353 (16.61) [100.00]
	ICICI	92509 (10.77) [5.81]	1592534 (25.93) [100.00]
	Total MP	859177 (100.00) [13.99]	6141799 (100) [100.00]

Figures in parentheses () are percentage to Madhya Pradesh.
Figures in [] are percentage to the total.

season. The business during *kharif* is riskier as compared to *Rabi*.

Benefited Farmers to Total Insured Farmers

The number of farmers who benefited from TI farmers during different seasons of 2016-17 is presented in Table 2. The results revealed that 13.99 percent of farmers were found to be benefited out of TI farmers (61.42 lakhs) in 2016-17. The TI farmers during *kharif* and *Rabi* season were found to be 60.88 and 39.12 percent, respectively, while it was found to be 96.46 and 3.54 percent out of total benefited farmers (8.59 lakhs). The number of farmers benefited was found to be only 22.17 and 1.27 percent out TI farmers during *kharif* (37.39) and *Rabi* (24.03 lakhs) seasons respectively. The total farmers insured during *kharif* were one and half times higher than the *Rabi* season, while 27 times higher in the case of benefited farmers. The cultivation of *kharif* crops was found to be riskier than in the *Rabi* season.

It was found that the farmer insured by AIC during *kharif* were found to be two times higher than *Rabi* season, but at the same time, farmers insured under HDFC and ICICI were found to be almost the same during *kharif* and *Rabi* season. Farmers benefited during *kharif* season were found to be 13.30 times higher than the *Rabi* season in the case of AIC and the percentage of farmers benefited was found to be 16.94. The percentage of farmers benefited out of TI farmer during *kharif* season was found to be maximum in case of HDFC (63.35 percent) followed by AIC (16.94 percent) and ICICI (11.19 percent) and during *Rabi* season only 2.67 percent farmers were found to be benefited out of total insured farmers under AIC while none of the farmers was found to be benefited under HDFC and ICICI. The results showed that AIC covering two times higher farmers in *kharif* than in *Rabi* season to insured farmers was a more risky season.

Number of Insured Farmers, Benefited Farmers and Cultivators

The number of LI, NLI, TI farmers and total benefited farmers out of cultivators covered by different agencies under PMFBY in Madhya Pradesh during 2016-17 is presented in Table 3. The results showed that the maximum number of LI (56.88 percent) and NLI (64.43 percent) farmers were covered by AIC followed by 15.59 and 29.03 percent by HDFC and 27.53 and 6.54 percent by ICICI. The TI farmers were found to be maximum in the case of AIC (57.46) followed by ICICI (25.93 percent) and HDFC (16.61 percent). The total benefited farmers also found to be maximum in the case of AIC (50.66 percent) followed by HDFC (38.57 percent) and ICICI (10.77 percent). Out of total cultivators (10114510), 6225379 (61.55 percent), 2159581 (21.35 percent) and 1729550 (17.10 percent) percent were covered by AIC, HDFC, and ICICI, respectively and 60.72 percent were insured as LI (56.09 percent) and NLI (4.63 percent).

Out of total cultivators, 92.08 (90.31 and 1.77), 56.69 (51.84 and 4.85) and 47.25 (40.95 and 6.30) percent were found to be insured under ICICI, AIC and HDFC,

Table 3. Number of farmers insured by different agencies under PMFBY in Madhya Pradesh, 2016-17

Agencies	Loanee insured	Non-loanee insured	Total insured farmers	Total benefited farmers	No. of cultivators
AIC	3227077 (56.88) [51.84]	301835 (64.43) [4.85]	3528912 (57.46) [56.69]	435241 (50.66) [6.99]	6225379 (61.55) [100.00]
HDFC	884344 (15.59) [40.95]	136009 (29.03) [6.30]	1020353 (16.61) [47.25]	331427 (38.57) [15.35]	2159581 (21.35) [100.00]
ICICI	1561918 (27.53) [90.31]	30616 (6.54) [1.77]	1592534 (25.93) [92.08]	92509 (10.77) [5.35]	1729550 (17.10) [100.00]
MP	5673339 (100.00) [56.09]	468460 (100.00) [4.63]	6141799 (100.00) [60.72]	859177 (100.00) [8.49]	10114510 (100.00) [100.00]

Figures in parentheses () are percentage to Madhya Pradesh.

Figures in [] are percentage to the total.

respectively and farmers benefited were found to be maximum in HDFC (15.35 percent) followed by AIC (6.99 percent) and ICICI (5.35 percent).

CONCLUSIONS

All the loanee farmers were found to insure their crops under PMFBY. In the case of NLI, only 7.63 percent of farmers insured their crops, which were found to be more in *kharif* (10.19 percent) as compared to *Rabi* (3.64 percent), due to erratic monsoon. It was found that out of total cultivators (10114510) in the State, 61.55, 21.35 and 17.10 percent were covered under AIC, HDFC and ICICI Lombard insurance agencies respondents, out of which these agencies covered 56.69, 47.25 and 92.08 percent of total insured farmers (6141799), respectively, while total cultivator, total insured and benefited farmers were found to be maximum in case of HDFC, as compared to AIC and ICICI. Hence, looking to present the scenario of climate change and changing pest and disease complex along with natural calamities there is an urgent need to make the farmers aware of PMFBY and its benefits so that each and every farmer particularly in rainfed areas should cover insurance for their crops. To achieve this system of

assessment of losses along with the calculation of indemnity and distribution of compensation should be made available to the farmers in a speedy manner utilizing remote sensing, IT, ground-truthing, etc.

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