

Performance of Pradhan Mantri Fasal Bima Yojana in Himachal Pradesh

Abstract

Agriculture plays a vital role in India's economy. About half of the population of India is still dependent upon the agricultural sector for their livelihood whereas its share in gross domestic product is declining. There is uncertainty in agriculture sector which create the problem of crop failure. In order to protect the farmers from the crop failure due to natural disasters and weather conditions, government of India has introduced the agriculture insurance schemes in the country. During January 2016, the Pradhan Mantri Fasal Bima Yojana has been introduced by replacing the national agriculture insurance scheme and modified national agriculture insurance scheme. The highest percentage of farmers who have insured their crops under the PMFBY can be seen in Maharashtra i.e., 20.69 percent. In Himachal Pradesh there are 260565 farmers who have insured their crops, out of that 77.24 percent are loanee and 22.76 percent are non-loanee farmers. The highest percentage of loanee farmers who have insured their crops can be seen in Kangra i.e., 38.13 percent.

Keywords: Indebtedness, Agrarian Crisis and Agriculture Insurance.

Introduction

A prominent peculiarity of agriculture in India is the continuing proliferation of small landholdings. The percentage of land owned by small and marginal farmers has gone up from 38 percent in 1953–54 to over 80 percent of all landholdings in 2013 (GOI, 2014). The contribution of this sector in gross domestic product of India has dropped sharply. Today, it accounts for merely 17.32 percent of GDP as compared to almost 47 percent at the time of independence. The decrease in the contribution of agriculture sector to GDP of India has not been accompanied by a matching reduction in the share of agriculture sector in employment (Economic Survey, 2018-19).

The uncertainty in agriculture along with the increasing dependence on purchased inputs leads to higher level of borrowings including borrowing from the informal sector and consequent difficulties in the repayment obligation which create stress among farmers. The problem is further aggravated by the near absence of effective risk mitigation measures in the field. The public investments and profitability in agriculture have declined whereas the cost went up by 114.4 percent between 1990-91 and 2000-01 (Path, 2008).

In recent years several unfavorable trends in Indian agriculture regarding farmers' suicides, declining prices of several crops, widening the gap between the agricultural and non-agricultural sectors and slowing down in the growth rate of agricultural sector have attracted discussion among scholars. Cumulatively they have contributed to generating a sense of a deepening agrarian crisis in the country. The fact that the suicides are related with high level of indebtedness and even in some academic writings, seen as indicative of the Indian peasantry in general suffering from a unbearable burden of debt. People are driven to the extreme step of suicide not only due to large borrowing from high cost sources for non-productive uses, as the increase in net incomes from loans used for productive purposes falls far below the expectations of farmers reason being the failure of crops. Suicide-afflicted farmers have also borrowed for digging/deepening wells and for cultivating input-intensive high-value crops (like Bt cotton) in the expectation of high yields and higher prices. Failure of these expectations is a major reason behind the inability to repay these debts and they take the extreme step to end their lives (Vaidyanathan, 2006).

Agriculture insurance is an important tool that can provide protection to the farmers. The idea of agriculture insurance has been

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introduced in India during the 1915, its proper implementation can be seen India after independence. The large number of agriculture insurance schemes is introduced in India like, Pilot Crop Insurance Scheme, National Agriculture Insurance Scheme, Weather Based Crop Insurance Scheme and Pradhan Mantri Fasal Bima Yojana. Earlier the premium rate charged under the scheme was high now, it reduced to two percent for kharif season crops, one and half percent for the rabi season crops and five percent the horticultural and commercial crops. Government of India has taken the keen interest in the development of agriculture insurance in India and it has setup the agriculture insurance company of India to deal with the agriculture insurance. Since 2005, the participation of the private sector in agriculture insurance has also started (Raju and Chand, 2007).

Objectives of the Study

1. To examine the growth and performance of Pradhan Mantri Fasal Bima Yojana in India.
2. To examine the growth and performance of Pradhan Mantri Fasal Bima Yojana in Himachal Pradesh.

Methodology

This paper is based on secondary data which is collected from the reports of government of India department of agriculture cooperation and farmer's welfare and agricultural statistics at a glance. This paper is divided into two sections. The section I deal with the performance of Pradhan Mantri Fasal Bima Yojana in India and section II deals with the performance of Pradhan Mantri Fasal Bima Yojana in Himachal Pradesh. The statistical tool i.e. percentage is used.

Section I

Performance of Weather Based Crop Insurance Scheme (WBCIS) in India

The first agriculture insurance scheme was introduced in India during 1972, after the numbers of agriculture insurance schemes are introduced in India. The weather based crop insurance scheme has been introduced during 2007, in Karnataka by the Agriculture Insurance Company of India. This scheme operates on the concept of area approach. The premium rate charged under the scheme was eight percent for the rabi season crops, ten percent for kharif season and twelve percent for the horticultural and commercial crops (Jain, 2004).

The percentage performance of weather based crop insurance scheme from 2007 to 2016 has been shown in the table 1. The table reveals that the highest percentage of farmers who have insured their crops can be seen in Rajasthan i.e., 62.54 percent followed by Bihar (17.97 percent), Andhra Pradesh (5.04 percent) and Maharashtra (4.06 percent). In case of Himachal Pradesh only 0.54 percent farmers who have insured their crops. If we talk about the area insured under the scheme Himachal Pradesh has fourth rank after Rajasthan, Bihar and Andhra Pradesh. The highest sum insured can be seen Rajasthan i.e., 38.74 percent followed by Bihar, Andhra Pradesh and Maharashtra i.e., 24.48 percent, 6.26 percent and 6.30 percent respectively. The highest percentage of gross premium is paid by the Rajasthan (38.88 percent) followed by Bihar (21.67 percent), Andhra Pradesh (12.32 percent) and Maharashtra (7.76 percent) whereas, the premium paid by the Himachal Pradesh is only 1.25 percent. The highest percentage of claims are paid to Rajasthan followed by Bihar, Maharashtra and Andhra Pradesh, the same ranking can be seen in case of number of farmers benefitted under the scheme.

Table 1 Percentage Performance of Weather based crop insurance scheme from 2007 to 2016

State	No. of farmers covered	Area insured	Sum insured	Gross premium	Claims paid	No. of farmers benefitted
Andhra Pradesh	5.04	6.26	12.17	12.32	11.27	4.67
Assam	0.09	0.04	0.19	0.19	0.03	0.09
Bihar	17.97	13.91	24.48	21.67	15.80	21.11
Chhattisgarh	0.00	2.38	3.57	3.44	3.38	1.66
Gujarat	0.69	0.44	0.18	0.18	0.09	0.34
Haryana	0.50	0.64	1.53	1.37	0.66	0.49
Himachal Pradesh	0.54	4.90	1.14	1.25	0.96	0.49
Jharkhand	0.82	0.60	0.97	0.87	0.71	1.04
Jammu and Kashmir	0.02	0.00	0.00	0.00	0.00	0.00
Karnataka	1.37	1.29	1.89	2.17	1.97	1.56
Kerala	0.23	0.13	0.30	0.29	0.29	0.25
Madhya Pradesh	1.93	2.04	4.10	4.08	3.22	2.27
Maharashtra	4.06	3.11	6.30	7.76	11.63	5.02
Odisha	0.44	0.48	0.53	0.46	0.34	0.43
Punjab	0.01	0.00	0.00	0.00	0.00	0.00
Rajasthan	62.54	61.54	38.74	38.88	41.48	57.04
Tamil Nadu	0.19	0.19	0.68	0.27	0.25	0.14
Telangana	0.23	0.18	0.42	0.43	1.19	0.28
Uttar Pradesh	2.90	1.40	2.13	3.71	5.68	2.75
Uttarakhand	0.25	0.34	0.51	0.51	0.92	0.23
West Bengal	0.17	0.13	0.17	0.16	0.14	0.13
Total	100	100	100	100	100	100

Source: Annual Report of Department of Agriculture, Cooperation and Farmer's Welfare 2016-17

Performance of Pradhan Mantri Fasal Bima Yojana (PMFBY)

Pradhan Mantri Fasal Bima Yojana has been introduced during January 2016. It follows the area basis approach. The maximum premium payable by the farmers is two percent for the kharif season, one and half percent for the rabi season and five percent for the horticultural and commercial crops. The insurance unit is reduced to the village level under this scheme. There is the provision of on account claims in case of damage of crops due to flood, severe drought, prolonged dry spell and unseasonal rains. The losses due to localised perils like hailstorm, landslide, inundation and post-harvest losses due to specified perils such as cyclone/cyclonic rain and unseasonal rain are to be assessed at the affected insured field of the individual insured farmer. The levels of indemnity are 70 percent, 80 percent and 90 percent corresponding to crop risks in the area are available for all crops (Dey and Maitra, 2017).

The percentage performance of Pradhan Mantri Fasal Bima Yojana from the kharif season

2016 to rabi season 2017-18 has been shown in table 2. The table reveals that the highest numbers of farmers who have insured their crops are of Maharashtra (20.69 percent) followed by Madhya Pradesh (20.48 percent), Rajasthan (18.68 percent) and Uttar Pradesh (15.70 percent). In case of area insured the highest percentage can be seen in Madhya Pradesh i.e., 35.48 percent followed by the Rajasthan (18.30 percent), Uttar Pradesh (14.11 percent) and Maharashtra (11.37 percent). The highest percentage of sum insured can be seen in Madhya Pradesh followed by Uttar Pradesh, Rajasthan and Maharashtra. The highest percentage of gross premium is paid by Madhya Pradesh, Maharashtra, Rajasthan and Gujarat. The highest percentage of claims is paid to Madhya Pradesh, Maharashtra, Tamil Nadu and Rajasthan. The highest percentage of beneficiaries can be seen in Maharashtra i.e. 33.03 percent whereas; the percentage of beneficiaries is only 0.17 percent in Himachal Pradesh.

Table 2**Percentage Performance of Pradhan Mantri Fasal Bima Yojana in India from Kharif 2016 to Rabi 2017-18**

States	No. of farmers	Area Insured	Sum Insured	Gross Premium	Claims	No. of farmers benefitted
Andhra Pradesh	2.29	1.80	3.60	3.10	1.16	0.77
Assam	0.04	0.03	0.05	0.01	0.00	0.00
Bihar	3.51	3.20	4.47	4.79	1.33	0.88
Chhatisgarh	0.37	0.57	1.59	0.34	0.08	0.21
Gujarat	2.01	3.01	4.00	9.42	8.76	3.74
Himachal Pradesh	0.90	0.32	0.34	0.11	0.03	0.17
Jharkhand	2.15	0.94	1.40	1.79	0.22	0.42
Karnataka	2.71	3.33	2.85	4.34	6.01	6.18
Kerala	0.09	0.08	0.21	0.08	0.06	0.04
Madhya Pradesh	20.48	35.48	31.46	28.04	33.51	16.25
Maharashtra	20.69	11.37	10.11	18.66	20.20	33.03
Manipur	0.02	0.02	0.03	0.02	0.02	0.09
Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00
Odisha	1.16	0.75	1.13	1.12	1.37	1.28
Puducherry	0.01	0.01	0.01	0.01	0.07	0.05
Rajasthan	18.68	18.30	10.27	11.54	9.94	20.07
Sikkim	0.00	0.00	0.00	0.00	0.00	0.00
Tamil Nadu	2.23	2.16	3.54	7.61	11.71	4.00
Telangana	1.34	1.22	2.26	0.61	0.57	0.70
Tripura	0.03	0.01	0.02	0.00	0.00	0.00
Uttar Pradesh	15.70	14.11	17.29	6.17	4.12	10.17
Uttarakhand	0.89	0.51	0.94	0.16	0.05	0.28
West Bengal	4.68	2.78	4.44	2.08	0.81	1.67
India	100	100	100.00	100.00	100.00	100.00

Source: Annual Report of Agriculture Insurance Company of India Limited 2018-19

Section II**Performance of Pradhan Mantri Fasal Bima Yojana in Himachal Pradesh**

Himachal Pradesh is mainly an agricultural State where Agriculture, Fisheries, Animal Husbandry and Horticulture provide employment to about 71 percent of the total population. Agriculture Sector contributes about 9.4 percent of the state domestic product. It is the main source of employment in Himachal Pradesh. About 90 percent of population of Himachal Pradesh depends upon agriculture. The natural endowments like soil, land, water etc. are

being harnessed in such a way that cherished goals of ecological sustainability, economic upliftment of farming community are achieved. About 18-20% area is irrigated and rest is rain fed in Himachal Pradesh (GOI, 2012-13).

To provide the protection to the farmers the national agriculture insurance scheme (NAIS) was introduced during the 1999-00, the 313 thousand farmers was covered under the scheme. By replacing the NAIS the PMFBY has been introduced in 2016. The crops covered under the scheme during the kharif season are maize and paddy. The insurance

companies deals with the agriculture insurance is IFFCO TOKIO General Insurance Co. Ltd. and Agriculture Insurance Company of India. The crops covered under the scheme for the rabi season are barley and wheat and the insurance companies deals for the rabi season crops are Agriculture Insurance Company of India and Oriental Insurance Company. The average indemnity level for the rabi and kharif season crops is 80 (Ghosh, 2018).

The district wise performance of Pradhan Mantri Fasal Bima Yojana has been shown in the table 3. The table reveals that there are 260565 farmers who have insured their crops, out of that 77.24 percent are loanee farmers and 22.76 percent are non-loanee. The highest percentage of loanee farmers who have insured their crops can be seen in Kangra i.e., 38.13 percent followed by the Hamirpur

(17.66 percent), Una (12.38 percent), Bilaspur (10.03 percent) and Mandi (8.17 percent) whereas no farmer has taken loan from the district Kinnaur. In case of non-loanee farmers Mandi has highest percentage of farmers who have insured their crops i.e., 59.25 percent followed by Bilaspur (20.22 percent) and Hamirpur (12.37 percent). The highest numbers of farmers who have insured their crops are from Kangra district followed by the Mandi, Hamirpur and Bilaspur i.e., 51580, 42886, 32172 respectively. The lowest number of farmers who have insured their crops can be seen in Kinnaur i.e., 121 only. The highest percentage of area insured can be seen in Kangra i.e., 31.90 percent followed by Hamirpur (16.64 percent), Mandi (16.55 percent) and Bilaspur (11.91 percent), the similar ranking can be seen in case of sum insured and percentage of gross premium.

Table 3 District Performance of Pradhan Mantri Fasal Bima Yojana in Himachal Pradesh during 2016-17

Districts	Loanee Farmers	Non-Loanee Farmers	No. of farmers	Area Insured (in hec)	Sum Insured (in Rs. Crore)	Premium (in Rs. Crore)
Bilaspur	20176 (10.03)	11996 (20.22)	32172 (12.35)	10169.054 (11.91)	45.07 (11.23)	45.95 (11.36)
Chamba	8743 (4.34)	29 (0.05)	8772 (3.37)	2159.0678 (2.53)	11.29 (2.81)	11.41 (2.82)
Hamirpur	35548 (17.66)	7338 (12.37)	42886 (16.46)	14209.7363 (16.64)	65.61 (16.34)	66.03 (16.33)
Kangra	76744 (38.13)	1753 (2.96)	78497 (30.13)	27248.6198 (31.90)	141.42 (35.22)	142.24 (35.17)
Kullu	0 (0.00)	192 (0.32)	192 (0.07)	83.103 (0.10)	0.26 (0.06)	0.26 (0.06)
Mandi	16436 (8.17)	35144 (59.25)	51580 (19.80)	14133.935 (16.55)	51.12 (12.73)	51.36 (12.70)
Shimla	670 (0.33)	354 (0.60)	1024 (0.39)	219.73 (0.26)	1.15 (0.29)	1.16 (0.29)
Sirmour	6959 (3.46)	725 (1.22)	7684 (2.95)	3546.27 (4.15)	18.35 (4.57)	18.42 (4.55)
Solan	11061 (5.50)	749 (1.26)	11810 (4.53)	4194.55 (4.91)	25.04 (6.24)	25.24 (6.24)
Una	24913 (12.38)	914 (1.54)	25827 (9.91)	9414.5588 (11.02)	42.1 (10.49)	42.29 (10.46)
Kinnaur	0 (0.00)	121 (0.20)	121 (0.05)	37.12 (0.04)	0.1(0.02)	0.1 (0.02)
Total	201250 (100)	59315 (100)	260565 (100)	85415.7447 (100)	401.51 (100)	404.46 (100)

Source: Ghosh, 2018

Conclusion

Agriculture is subject to the wide variety of risks, including many hazards arising from wide spread of natural disasters. These natural disasters destroy the crops and increase the stress among the farmers. To provide protection to the farmers, various agriculture insurance schemes have been introduced in the country by the government of India. PMFBY has been introduced in the country during 2016, the highest percentage of area insured under the scheme can be seen in Madhya Pradesh whereas the highest percentage of farmers who have insured their crops belong to Maharashtra. In Himachal Pradesh the highest percentage of area insured can be seen in Kangra and lowest in Kinnaur.

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