



CROP INSURANCE IN INDIA WITH REFERENCE TO PRADHAN MANTRI FASAL BIMA YOJNA

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While the Government of India has made various efforts to address farmers' grievances, the policies are insufficient, weighed down by their being merely ad hoc and subject to political wrangling. There is imperative for a financial safety net that does not consist only of direct transfers and loan waivers- short terms solutions that often prove to be counterproductive but a framework that is timely, consistent and in terms with farmers' quality of life.

INTRODUCTION

Agriculture plays a vital role in economic development of India. At present 70% population of the country is dependent on agriculture. India's agricultural sector, which contributed 16% of the country's GDP in 2017 supports the livelihood of 43.9% of the population. The employment in this sector has decreased by 10% points within a decade from 53.1% in 2008 to 43.9% in 2018. But the irony is, the agriculture on which majority of the population is dependent for livelihood is itself dependent on monsoon which is always flexible. Indian agriculture has little more than half (53%) of its area still rain fed. This makes it highly sensitive to weather conditions such as flood, drought, heat waves, cyclones and hailstorms cause extensive crop damage. Subtle fluctuations in weather during critical phases of crop development can have a substantial impact on yield. Climate change increases agricultural risk by increasing variability in rainfall, causing water stress, enhancing susceptibility to plant diseases and pest attack and more importantly, raising the frequency, intensity and duration of extreme weather events like droughts, floods, cyclones and storm surges. It leads to operating risk in cultivation of different crops.

Natural calamities may affect agricultural production and farm income. Susceptibility of agriculture to these disasters is compounded by the outbreak of epidemics and man-made disasters such as fire, sale of spurious seeds, fertilizers and pesticides, price crashes etc. All these events severely affect farmers through loss in production and farm income and are beyond the control of farmers. With growing commercialization of agriculture, the magnitude of loss due to unfavourable eventualities is increasing. This sector is facing manifold problems such as crop failures, non-remunerative prices of crops and poor returns on yield. Agrarian distress is so severe that it is pushing the farmers to despair and about 39% of the cases of farmers suicides in 2015 were attributed to bankruptcy and indebtedness.

While the Government of India has made various efforts to address farmers' grievances, the policies are insufficient, weighed down by their being merely ad hoc and subject to political wrangling. There is imperative for a financial safety net that does not consist only of direct transfers and loan waivers-short terms solutions that often prove to be counterproductive but a framework that is timely, consistent and in terms with farmers' quality of life.

Farmers are vulnerable to the agricultural risks and to cover the risk which may occur in near future, there is need to some provision and crop insurance is the only mechanism available to safeguard against production risk in agriculture. This mechanism can effectively address the risk to output and

income resulting from various natural and man-made events.

Farmers' primarily face two types of risks- Yield Risk and Price Risk. An unplanned and major variation in either the yield or price of a crop in a particular agricultural cycle can turn into significant loss to the farmers. Yield Risk refers to uncertainty regarding the quantity and quality of agricultural production harvested at the end of the agricultural cycle. Erratic rainfall distribution has an adverse impact on agricultural production. According to the Planning Commission 11th Five Year Plan 2007-12, on an average crop on 12 million hectares of land are damaged annually by natural calamities and adverse seasonal conditions of the country. Price Risk refers to the uncertainty about prices that farmers receive for their produce. During years of high production price of crop slide downwards affecting the income of the farmers. Income of the farmers depend both on price and yield which are inversely related to each other. When aggregate production of commodity increases market price tends to decrease and when yield falls price generally rises. This offsetting nature of price and production effect has somewhat cushioning impact on farmers' income. (Gulati, Terway & Hussain)

CROP INSURANCE

The solution to the problem of rural credit requires integration of development and extension of co-operatives with crop insurance scheme. Crop insurance is a price support given to cultivators for agricultural product in situation of crop failure. It is a safeguard against fresh doze of debt intake. To combat the risk incurred in agricultural production and productivity there is a need to adopt strategy which may provide comprehensive solution to farming communities for safeguarding their agricultural productivity. Crop insurance is one such area which is gaining momentum in the country. This is considered as the best opinion to help in transferring the cost of potential losses due to disaster or emergency situation. Crop insurance as a risk mitigation tool in agriculture emerged in India in the beginning of the twentieth century. Ever since its inception to implementation it has been evolving continuously in terms of scope and practice.

The crop insurance scene in India is two- pronged. One of these prongs, a government programme that has a strong social objective, loses vast sum each year. Officials are believed to be attempting to re-design this programme, in order to make it more efficient and sustainable. The task is immense. In 2000 the programme insured 10.5 million farmers on 15.7 million hectares of crop land. A few insurance companies are active in offering commercially sound insurance products, especially geared to producers of high quality fruits. The General Insurance Corporation (GIC) of India has formed a specialist subsidiary Agricultural Insurance Corporation in order to provide a company focus for this class of business. Indian farmers particularly rain fed farmers has been facing partial or total crop losses frequently due to various controllable (like pests and diseases) and uncontrollable risks (like weather risks). Their coping mechanisms for addressing these risks are not adequate and not available. Due to climate changes these issues are expected to increase in severity and frequency. Crop insurance as a solution to these issues has been in practice for long years. Indian crop insurance scenario has changed significantly in the recent past after private companies like ICICI Lombard, IFFCO Tokyo entered the scene with variety of weather insurance products. Even then the coverage is significantly very low. (Sarangi & Panigrahi)

EVOLUTION OF CROP INSURANCE SCHEMES

The question of introduction of a crop insurance scheme was taken up for examination soon after the independence in 1947. An assurance given in this regards by the Ministry of Food & Agriculture in the

central legislature to introduce crop and cattle insurance in the country, a special study was commissioned in 1947-48. In 1965, the government introduced a crop insurance bill and circulated a model scheme of crop insurance on compulsory basis to constituent state government for their views. However, none of the states was in favour of the scheme because of very high financial obligations.

The first ever crop insurance scheme by an insurance company was introduced in the country in 1972 by the General Insurance Corporation of Life Insurance Company of India on an experimental basis. The scheme covered H-4 Cotton in selected districts of Gujarat. It continued up to 1978-79 and covered only 3119 farmers for a premium of Rs 4.54 lakh against claims of Rs. 37.88 lakh. The General Insurance Corporation of India introduced Pilot Crop Insurance Scheme in 1979. The scheme was implemented in 12 states till 1984-85 and covered 6.23 lakh farmers for a premium of Rs. 195.01 lakh against claims of Rs. 155.68 lakh in the entire period. (Mahajan & Bobade)

Against this backdrop the Comprehensive Crop Insurance Scheme (CCIS) was introduced by the Government of India from Kharif 1985 covering major cereal crops, oilseeds and pulses. The scheme was undertaken in 15 states and 2 union territory. Participation in the scheme was voluntary. Around 5 million farmers and between 8-9 hectares were annually covered by the scheme. If the actual yield in any area covered by the scheme fell short of the guaranteed yield the farmers were entitled to indemnity on compensation to the extent of shortfall of the yield. The sum insured equal to crop loan disbursed subject to a maximum of Rs. 10,000 per farmer. The premium charged was at the rate of 2% for rice, wheat and millets and 1% for pulses and oilseeds.

Experimental Crop Insurance Scheme was introduced in 1997-98 covering non-loanee, small and marginal farmers growing specified crops in selected districts. The premium was subsidized. The Centre and the State shared the premium and claims in the ratio of 4:1. This scheme was implemented in 14 districts of 5 states and only 5 lakh farmers were covered with the sum of Rs 172 crores. The government had to stop the scheme as the scheme failed.

The failure of the previous scheme led to the introduction of National Agricultural Insurance Scheme (NAIS) or the Rashtriya Krishi Bima Yojna in 1999-2000. The scheme covered all food crop, oilseed, horticultural and commercial crops. The premium rate was capped at 1.5 to 3.5% of sum assured for food crops. The small and marginal farmers were entitled to a subsidy of 50% of the premium charged. This subsidy is shared by centre and state government equally. The old scheme of NAIS of 1999-2000 and the Modified National Agriculture Insurance Scheme (MNAIS) introduced in Rabi 2010-11 did not succeed. As per official data in 2015 only 1/5th of the country's farm land was under crop insurance. In MNAIS the premium was capped at 8-12% of sum insured to limit the government's subsidy outgo. (rajlaxmi)

The performance of NAIS scheme was satisfactory. The number of farmers under the wings of the scheme was 5.80 lakh in 1999-2000 and it increased to 965 lakh in 2006-07. The amount of total sum insured was Rs. 356.40 crore in 1999-2000 which rose to Rs. 104679.2 crore in 2006-07 and the total area covered in 1999-2000 was 7.80 lakh hectare and it increased to 1633.1 lakh hectare in 2006-07. This scheme was implemented in 24 states and 2 union territories.

Farm Income Insurance Scheme (FIIS) was formulated by the Central Government during 2003-04. The two critical component of farmer's income are yield and price. This scheme targeted these components through a single insurance policy so that insured farmer could get a guaranteed income. The scheme provided income protection to the farmer by insuring production and market risks. The insured farmers were insured minimum guaranteed income which was calculated by multiplying

average yield by minimum support price. This scheme was introduced as a pilot project from Rabi 2003-04 covering wheat and paddy in 18 districts of 12 states.

Weather Based Crop Insurance Scheme (WBCIS): This scheme was initiated with the objective to bring more farmers under the field of crop insurance. Thus, a Pilot WBCIS was launched in 20 states as announced in the Union Budget 2007. WBCIS aims to provide insurance protection to the farmers against weather incidence, such as deficit and excess rainfall, high or low temperature, humidity etc which are deemed to impact adversely the crop production. WBCIS is based on actuarial rates of premium but to make the scheme attractive premium is charged actually charged from the farmers' are restricted at par with NAIS. Since its inception in Kharif 2007, 323.74 lakh farmers have been covered over an area of 450.31 lakh hectare insuring a sum amounting to Rs 55813.40 crore have become payable against the premium of about 5113.25 crore benefitting about 181.26 lakh farmers' up to Kharif 2012 season.

However, the success of these schemes had been spasmodic. To overcome this, the latest feather to the wing in crop insurance segment is the Pradhan Mantri Fasal Bima Yojna launched by our Prime Minister Narendra Modi on 18th February 2016. Thereafter, all the aforementioned schemes barring WBCIS were discontinued. WBCIS is still in force but has been renamed as Restructured Weather Based Crop Insurance Scheme (RWBCIS).

PRADHAN MANTRI FASAL BIMAYOJANA

The flagship crop insurance scheme Pradhan Mantri Fasal Bima Yojana was launched by the Government of India in 2016. Pooling in the important learning from all the earlier schemes PMFBY has made several improvements compares to its predecessors, the National Agricultural Insurance Scheme and the Modified National Agricultural Insurance Scheme. Hence, this scheme has replaced the existing two schemes namely, NAIS and MNAIS which had some inherent drawbacks. This scheme aims to bring as many farmers' as possible in the ambit of crop insurance. The premium rates to be paid by the farmers have been reduced substantially so that more farmers are able to avail insurance cover against crop loss on account of natural calamities.

This scheme would be providing insurance coverage and financial support to farmers in the event of failure of any of the notified crop as a result of natural calamities, pests and diseases. This would also stabilize the income of the farmers to ensure their continuance in farming. Accordingly, farmers will be encouraged to invest in the innovative and modern agricultural practices, ensuring flow of credit to the agricultural sector. Prime highlight of the scheme is the enrolment which is compulsory for the farmers in the notified area who have a crop loan or KCC account. Not only this the government is also encouraging coverage of non-loanee farmers as well.

One of the highlights of this scheme is the absence of any upper limit on government subsidy even if the balance premium is 90 percent. The scheme was implemented in February 2016 and was allocated an initial central government budget of 5500 crore for 2016-17. It has increased by 154 percent as announced in the Interim Budget of 2019. This massive increase in the outlay for the scheme shows that it is important for the government to ensure all farmers' and guarantee financial support and flow of credit to them in the event of crop-yield loss.

The PMFBY was implemented to ensure transparency, availability of real - time data and an accurate assessment of yield loss. The state run Agricultural Insurance Corporation of India (AIC) which has been allocated the largest number of districts under the scheme, handles insurance in other districts and states.

FEATURES AND PHASES OF PMFBY

PMFBY is a large scale crop subsidy insurance scheme in India with Kharif 2016 being first season. Farmers have to pay a net premium of 2% for Kharif crops, 1.5% for Rabi crops and 5% for commercial crops. The difference between actuarial premium and farmers' burden is shared equally by Central government and State government for crops and regions under their jurisdiction and based on the costs of cultivation. The actuarial premium rates is determined by the insurance companies after receiving scale of finance data and indemnity levels shared by states. PMFBY follows an Area Approach and there is a compulsory coverage for farmers in a notified area taking loans whereas the non-loanee farmers are encouraged to enrol for the insurance scheme.

There are four phases in the insurance cycle which repeats every cropping season. All the stakeholders are involved in the cycle. The banks and government act as facilitators in the process. The cycle keeps repeating every crop season. These phases are as follows:

1. **Tendering Phase :** The first phase of the cycle begins before the start of the cropping season. The individual state government float the tender along with the data on threshold yield over the past 10 years for various notified crops in the state. The state is divided into clusters and each cluster consists of a balance of a high risk and low risk districts. The participating insurance companies use the data of threshold yield provided by the government to calculate the actuarial premium rates. The actuarial premium rates can vary for same crop in various districts.
2. **Farmer Enrolment :** Once the tendering is done the insurer ties up with lead banks, local banks and co-operative societies in order to get farmers on board the insurance scheme. The government acts as catalyst in ensuring that farmers are aware of the insurance scheme. The banks plays a pivotal role in ensuring that the loanee farmers are insured.
3. **Yield Estimation :** The third and arguably the most important phase of the insurance cycle occurs in the ending months of the cropping season when the produce is ready for harvest. The crop cutting experiments (CCEs) are performed to estimate the yield of the crop. The CCEs are conducted and coordinated by the district and state level authorities through multi stage stratified random sampling.
4. **Claim Settlement :** Based on the CCEs performed by the primary workers the claims are determined as per the operational guidelines. There are important protocols to ensure the yield loss assessments take place effectively and the linked claim disbursements are timely.(Ranjan Kumar Ghosh)

REVIEW OF LITERATURE

Crop insurance is a price support for the cultivators of agricultural products in case of crop failure. India is an agrarian economy and gamble to monsoon. The climatic fluctuations often result in crop failure. The government intervention to pull out farmers' out of distress through the crop insurance schemes is the need of the hour. Research work on crop insurance scheme has been done by various researchers and considerable amount of literature has been developed by the researchers to evaluate the performance of various crop insurance schemes. Different types of views related to crop insurance has been studied by many researchers, scholars and economists. The review of various scholars and analysts has been stated in the following paragraphs:

Ashok Gulati, Perna Terway and Siraj Hussain (2019) through their paper evaluated the agriculture

insurance scheme that existed in the country and also review has been made as to how USA, China and Kenya have implemented the crop insurance scheme. A particular focus of this paper is to emphasize the role of technology and experience from some of best international practices in crop insurance.

The Paper by Shrikrishna. S. Mahajan and Amol. H. Bobade (2012): has analysed the NAIS scheme since its inception in detail and has concluded that adversity of weather is the greatest enemy of Indian farmers. Even after years of launching of the program there is lack of awareness of farmers' about scheme. Only loanee farmers and KCC holders covered by default but non-loanee farmers are not aware of the scheme and also, all crops is not covered under NAIS.

Sarangi and Panigrahi (2016): has analysed the various insurance schemes like MNAIS and WBCIS. The study analyzed that implementation of technology in farming involves investment. Such changes also alter the risk profile of the enterprise. Crop insurance and loan links are common. Heavily subsidized scheme in India is largely linked to bank lending. The role of state is very important making available crop insurance on a large scale as they are public in nature. The study further reveals that in certain selected districts of Odisha for some crops like jute, cotton, ginger, banana etc farmers' have taken advantage of the scheme.

A Study by Sona H. C. and Y. Muniraju (2018) : makes an attempt to study the status of crop insurance and adaptability of crop insurance, purchase benefits and satisfaction level among farmers' of Kodagu district of Karnataka. The study reveals that size of holdings, age, income level, access to loan facilities, source of obtaining information about crop insurance programme, number of years occupied in farming activities and loss of crop due to unfavourable weather conditions were the major factors influencing the farmers to adopt crop insurance. Delayed settlement of claims, lack of awareness about the scheme and lengthy procedure to obtain the crop insurance were the major constraints faced by the farmers'.

The Study by Sreejamol. K.S. Sridevi. K.B, Priyadarshini. V and Visagamoorthi. D. (2018) The study highlights the necessity to protect the farmers from natural calamities and to ensure their credit eligibility for next season. The present study scrutinizes the nature and scope of speciality insurance WBCIS in the country and its impact on the farmers' in Kerala. The study points that the socio-economic status of the farmers cannot be overcome by this policy because of insufficient policy intervention though the crop insurance is appreciated widely as a critical risk mitigation tool.

Gurudev Singh (2010) in his working paper discusses the dependence of Indian agriculture on uncertain rains. In addition the farmers experience other production risks as well as marketing risks. It argues the need for crop insurance as an alternative to manage production risk. The paper presents the historical overview of crop insurance products and their performance and also highlights the performances of two important schemes namely, NAIS and WBCIS.

Saraswathi Kumbalep and M. Devaraju (2018) through their paper examined the awareness and perception of farmers about crop insurance. Farmers' have lot of confusion about drought relief and crop insurance hence proper awareness regarding the procedure to avail crop insurance covering all types of crop and making it compulsory for farmers will help.

Mamta Swain (2014) assessed the performance of National Agricultural Insurance Scheme, NAIS (area based crop yield insurance) and the Pilot Weather Based Crop Insurance Scheme, WBCIS (area based rainfall insurance) under implementation in the state of Odisha, the climate change hot spot of

India. It is concluded from the study that WBCIS seems to perform better than NAIS because of higher coverage, larger percentage of farmers benefitted, lower premium, faster and more frequent compensation payment and more transparency. WBCIS covers only weather related risk and the sum assured and the compensation amount are low.

The Study of C. Hazarika and Sabina Yasmin (2018) address the adaptability constraints faced by the farmers under MNAIS. In this study with the participation of the insured and uninsured farmers, attempts have been made to find out some key factors that influences the participation of the farmers of Kamrup and Dhubri district of Assam in adopting the crop insurance scheme. LOGIT model was used in the study. The level of education, income and distance from financial institutions were some of the important variable that has an impact on purchase of insurance. Probability of insurance was significantly higher for those who have access to non farm income.

Bindiya Kunal Soni and Jigna Trivedi (2013) made an attempt to understand the existing scenario of crop insurance in India with a special reference to Gujarat. The study empirically checks upon the awareness level of farmers in Anand district. The paper examines the perception of those who have availed or not availed crop insurance in various villages of Anand district. It further suggests to increase the awareness level of the farmers for ensuring better penetration of crop insurance in Anand district.

OBJECTIVES OF THE STUDY

The present study is concerned with the performance of various crop insurance scheme of Government of India. The study revolves around certain major objectives which are outlined as follows:

1. To compare various insurance schemes of the government.
2. To analyze the funds released for crop insurance in various years.
3. To evaluate the performance of PMFBY namely area insured per hectare, sum insured per hectare and per farmer, total premium.
4. To analyze the crop-wise performance of PMFBY in various years.

METHODOLOGY

This study is based on secondary data. The secondary information has been collected from the Annual Report of Ministry of Agriculture and Farmers' Welfare.

ANALYSIS

Any country that is serious about its developmental goals cannot deny the importance of insuring farmers' against unintended losses. Farming is the largest private enterprise of Indians. There are two key differences though: inputs and outputs are plagued with uncertainties of the highest order. Insurance in this situation, is a necessity. Keeping in view the risks involved in agriculture and to insure the farming community against various risks, Ministry of Agriculture has introduced various crop insurance schemes and thereafter brought improvements in the erstwhile schemes from time to time.

Table : 1, Total Funds Released for Crop Insurance Scheme in Various Years

Amount in crore

Plan/ Year	Expenditure
IXth Plan (1997-2002)	811.49
Xth Plan (2002-2007)	2626.84
XIth Plan (2007-2012)	7311.35
2012- 2013	1549.68
2013- 2014	2551.52
2014- 2015	2598.35
2015- 2016	2982.47
2016- 2017	11054.63
2017- 2018	8058.75

Source: Annual Report, Department of Agriculture, Cooperation & Farmers Welfare 2017-18

The table above analyses the total amount of fund released by the government in various years from crop insurance schemes. From period 1997 to 2018 government implemented various crop insurance schemes namely, NAIS, WBCIS, MNAIS and PMFBY. It is very clear that since the inception of PMFBY the amount of funds released for crop insurance scheme has increased. Compared to other years the funds released from 2016 is more and is increasing in the following years. The year 2016 marks the year of inception of PMFBY. In 2015-16 the funds released was Rs. 2982.47 crore which increased to Rs 11054.63 crore in 2016-17 and in 2017-18 it was Rs. 8058.75 crore

Table : 2, Comparison of Various Crop Insurance Schemes in India

Features	NAIS (1999)	MNAIS (2010)	PMFBY (2016)
Premium Rate	Low	High (9 - 15%)	Low (govt. to contribute five times that of farmers)
One Season – One Premium	Yes	No	Yes
Insurance amount covered	Full	Capped	Full
On account payment	No	Yes	Yes
Localised Risk Coverage	No	Hailstorm, Landslide	Hailstorm, Landslide, Inundation
Post- Harvest	-	Coastal	-
Prevented Sowing Coverage	No	Yes	No
Use of Technology	No	Intended	Mandatory
Awareness	No	No	Yes (target to double coverage to 50%)
Insurance Company	Only Government	Govt & Private	Govt & Private

Source: PIB, Ministry of Agriculture & Farmers Welfare, January 2016.

The PMFBY scheme is a refined version of its predecessors namely, NAIS, MNAIS, WBCIS. The models prior to PMFBY were claim- based insurance scheme. Premium rate in case of MNAIS was high between 9 -15% and for PMFBY was low and government was to contribute five times that of farmers. The NAIS was backed by only government funded insurance company called Agricultural Insurance Company (AIC) which collected premiums from the farmers without any subsidy and then use that money to pay the claims at the end of the season whereas the PMFBY allows a subsidy in the premium based system which is implemented by a framework of private insurance company, ministry of agriculture Government of India and state government in co-ordination with Commercial Banks, Co-operatives, Regional Rural Banks. The PMFBY was created to target 50% of all farmers whereas the previous schemes saw less enrolment due to lack of trust and awareness. Regarding the use of technology in case of NAIS scheme it was not necessary and in case of MNAIS scheme it was intended to be used and in case of PMFBY it was mandatory. The insurance amount covered in case of NAIS and PMFBY was full whereas in case of MNAIS it was capped.

Table : 3, Percentage Change in Indicators for Kharif Season Under PMFBY

Particulars	Kharif 2016	Kharif 2017	% Change
Farmers Insured	40,258,737	34,776,055	-0.14
Claims Paid (in crore)	10496.3	17209.9	0.64
Gross Premium (in crore)	16317.8	19767.6	0.21
Area Insured (in hectares)	37,682,608	34,053,449	-0.10
Farmers Benefitted	10,725,511	13,793,975	0.29

Source: Annual Report, Ministry of Agriculture and Farmers Welfare.

The table above indicates that the number of farmers' has declined by 14% from Kharif 2016 to Kharif 2017. The total area insured has decreased by 1% over the span of one year. The crop insurance scheme PMFBY has failed to increase the area and the number of farmers insured. However, the claims paid shows an increase of 64%, the gross premium paid also shows an increase of 21%. There is an increase in percentage of farmers who benefitted from the scheme by 29%.

Table : 4, Coverage Per Farmer, Per Hectare Under PMFBY

Particulars	2016-17	2017-18
Farmers Enrolled	55218614	50076399
Area Insured (ha)	5,54,21,861.4	4,89,29,860.1
Sum Insured (in crore)	1,90,158.95	1,90,381.44
Area Insured per farmer	1.00	0.98
Sum Insured per hectare (in crore)	34,311.18	38909.05
Sum Insured per Farmer (in crore)	34,437.47	38,018.20

Source: Annual Report, Ministry of Agriculture and Farmers Welfare.

The table shows the coverage per farmer, per hectare under the PMFBY. The number of farmers enrolled under this scheme has decreased in 2017-18 by 51,42,215 as compared to that in the year

2016-17. The area insured under the scheme has also declined by 6,49,200.13 hectares. There has been a very minute decrease in area insured per farmer from 1 hectare in 2016-17 to 0.98 hectare in 2017-18. Despite, the area insured has decreased but the sum insured has increased in 2017-18 by Rs. 222.49 crore and the sum insured per hectare shows an increase of Rs. 4597.87 crore. The sum insured per farmer has also increased from Rs. 34,437.47 crore to Rs. 38018.20 crore.

Table : 5, Total Premium with Government and Farmers' Share Under PMFBY
Amount in Rs. crore

Particulars	2016-17	2017-18
Farmers share of Premium	3957.10	3916.98
Central govt. share of premium	8182.63	9609.40
State govt. share of premium	8371.98	9679.21
Total Premium	20513.67	23206.18
Premium per Farmer	3714.99	4634.16

Source: Annual Report, Ministry of Agriculture and Farmers Welfare.

The table highlights the total premium with government and farmers' share under the PMFBY. The share of premium contributed by farmer has decreased from by Rs.40.12 crore but the share of central government has increased by Rs. 1426.77 crore. The share of state government has inclined by Rs. 1307.23 crore in the year 2017-18 as compared to 2016-17. The total premium has also increased in 2017-18 by Rs. 2692.51 crore and the share of premium per farmer has increased by Rs.919.17 crore in 2017-18.

Table : 6, Crop-wise Percentage of Area Insured under all Insurance Schemes
Area in Lakh Hectare

Crop	2014-15	2015-16	2016-17
Paddy	21.81	25.98	29.45
Wheat	24.57	27.38	31.35
Coarse Grains	19.75	23.38	21.38
Sugarcane	2.62	4.11	5.13
Cotton	12.10	11.44	28.29
Jute & Mesta	8.46	0.43	8.91
Oilseeds	35.68	46.62	29.64
Pulses	35.68	46.62	29.64
Vegetables	36.38	35.49	12.32
Fruits	5.41	9.47	8.37
Others	4.19	9.48	51.52
Total	22.21	26.41	28.63

Source: Department of Agriculture, Co-operative and Farmers Welfare.

The table above shows percentage of area insured for all categories of crops. Total area insured for all crops has shown an increase from 22.21% in 2014-15 to 28.63% in 2016-17. Since the inception of PMFBY the area insured has shown an increase from 26.41% in 2015-16 to 28.63% in 2016-17. The area insured under coarse grains showed an increase in 2015-16 but again declined in 2016-17 from 23.38% to 21.38%. Similar was the case for oilseeds, pulses, vegetables, fruits these categories showed an increase in percentage of area insured in 2015-16 and then decreased in 2016-17 it decreased.

CONCLUSION

Many schemes of crop insurance have been launched in the country but they failed to influence the farmers and share the risk of the farmers. Now a days farmers facing agrarian distress are committing suicides due to risk management. The farmers are selecting the option of suicides rather than that of crop insurance. Hence, there is need of serious concern of the problem of sharing the risk of farmers and protecting their crops against adverse weather and natural calamities. An effective crop insurance scheme is crucial for meeting the income losses for farmers, financing inputs for agricultural production and increasing access to agricultural credit to boost agricultural productivity. It is seen that the percentage of area insured under various insurance schemes especially after the inception of PMFBY has increased for various crops. Total premium with the government and farmers share under PMFBY has increased from 2016-17 to 2017-18. The sum insured per farmers and per hectare has also increased. The study reveals that the insurance amount covered is full and it covers risk from vagaries of nature like hailstorm, landslides and inundation. Under PMFBY there is one premium for one season. This scheme ensures the use of technology for agricultural production to increase the productivity. There has been increased inflow of funds for crop insurance over the years. Good awareness creation and providing crop insurance easily and at familiar places like panchayat will increase the percentage of farmers using crop insurance. Communication on time to farmers regarding date for purchasing crop insurance will also help in generating awareness among farmers.

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