Ind. Jn. of Agri. Econ.
Vol.74, No.2, April-June 2019

Assessment of Crop Insurance in India through 4Cs: Cost, Coverage, Compensation and Crop Loss

Mukesh and Kamal Pandey*

ABSTRACT

Government has always taken care of farmer's welfare through policy intervention on agriculture. In fact, recently the entire agricultural policy was concentrated around the farmer's welfare of the country. There are many challenges but the biggest challenge facing India is to ensure the protection of agricultural produce of farmers against risks and uncertainty. The reason is obvious as more than half Indian population is engaged in agricultural sector for their livelihood. The recent decision of Government to introduce Pradhan Mantri Fasal Bima Yojana is key intervention to minimise the risk of crop failure. As we all are aware, Indian agricultural system is diverse, complex and faces multiple problems specially related to crop insurance. The first problem relates to coverage and premium paid for the particular crop. Secondly the financial loss of the crop failure and the third problem is compensation of crop loss. Compensation relates to both timeliness as well as amounts. In this paper, an attempt has been made to address the above issues at all India level with the help of unit level data on *Situation Assessment Survey of Agricultural Households in India* collected by National Sample Survey Office during 70th Round (January – December 2013).

Key Words: Agricultural development, NSSO, Farmer's income, Crop insurance.

JEL: D81, Q12, Q54

I

INTRODUCTION

As we all are aware economic dependence of most of the population of the country is on agriculture. More than 50 per cent population is engaged in agricultural sector as a direct source of livelihood. Government of India has been trying hard to improve the agricultural system of the country in general and crop production in particular since Independence. However, hindrances such as high dependency on monsoon, unpredictable weather patterns, falling water tables, reduction in arable land (per capita availability), decreasing farm sizes, low productivity, damage due to pest attacks and a very long supply chain (dominated by middle men) keep pulling down Indian agriculture.

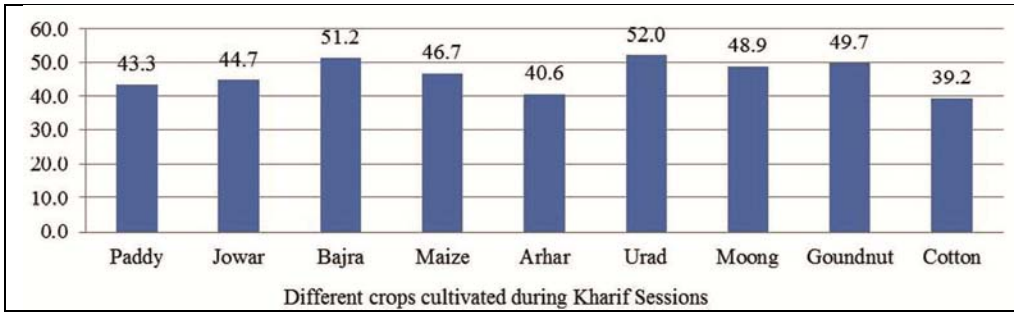
To overcome the above problems, application of best solutions, be that linked to agronomy, plasticulture, fertigation, seed treatment, crop protection chemicals, biotechnology, precision farming, etc. have been advocated. It has also been argued

*Officer, Indian Statistical Service and Joint Director, National Sample Survey Office (Coordination and Publication Division), Ministry of Statistics and Programme Implementation, Government of India and Deputy Director, Ministry of Drinking Water and Sanitation, Government of India, respectively.

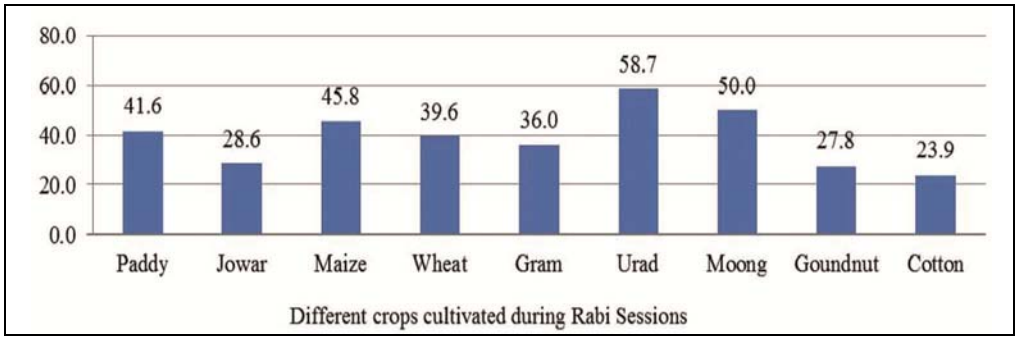
The views expressed herein are solely of the authors and do not represent that of the organisations where they are serving.

that India needs a second breakthrough in agriculture in order to become a global manufacturing hub of quality crops production.

Agriculture sector is the one of the important components of the Indian economy and is always source of raw material for the industries. Besides manufacturing, agriculture sector provides great employment opportunities for rural people/youth on a large scale for their livelihood and also provides an entrepreneurship. Indian agricultural system is diverse, complex and faces multiple problems. The biggest challenge is to ensure the protection of agricultural produce of farmers against risks and uncertainty. The different crops insurance schemes visualised by Government have faced several problems. The first problem relates to coverage and premium payment. Second problem is financial loss due to crop failure and the third problem is timely compensation of crop loss. In fact, it was found that a huge chunk of Indian farmers are not aware about the crops insurance facilities and the same can be seen from the two graphs given below.



Graph 1. Percentage of Agriculture Households not Insuring Different Crops (*Kharif*) Because of Lack of Awareness about Crop Insurance Facility.



Graph 2. Percentage of Agriculture Households not Insuring Different Crops (*Rabi*) Because of Lack of Awareness about Crop Insurance Facility.

Government has set a target to double farmers' incomes by 2022; the 75th year of India's Independence and accordingly adopted the seven-point strategy. Raising crop production, reducing cultivation costs and post-harvest losses and reforming agriculture markets are among the focus areas. Adding value to farm produce via food processing, risk mitigation through crop insurance and disaster relief and promotion of allied activities such as horticulture and animal husbandry are the other areas of intervention. To achieve the above strategies Government has rolled out various farmers' welfare schemes like Soil Health Card Scheme, Neem Coated Urea, Paramparagat Krishi Vikas Yojana (PKVY), Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), National Agriculture Market (e-NAM), Pradhan Mantri Fasal Bima Yojana (PMFBY) and Interest Subvention Scheme. These above strategies and schemes were introduced under the Pradhan Mantri Fasal Bima Yojana.

The efforts made by Government to increase the farmer's income are possible through two approaches. First is to reduce the inputs cost of crops cultivation and second is to increase production or to secure the agriculture produce. For increasing production or securing the agriculture produce, crop insurance is one of the important tools and that is why so many new developments in this field are taking place. The challenges in the area of crop insurance that has been listed above may be minimised through policy intervention. Targeted policy intervention demands evidence and evidence is possible through analytical study. This paper has been initiated with the objective to give the clear assessment of crops insurance in India on cost, coverage, complementation and crop loss at all India level with the help of unit level data on *Situation Assessment Survey of Agricultural Households in India* collected by National Sample Survey Office during 70th Round (January - December 2013) (Government of India, 2014). The information collection mechanism of NSSO during the survey period was totally scientific and all due process was followed during the reference period of the survey (Government of India, 2015; 2016).

II

CROP INSURANCE IN INDIA: INITIAL INITIATIVES TO LATEST DEVELOPMENT

Protection of crop produce from natural calamities like droughts, floods and other unforeseen events is very important as it has direct link with the livelihood of farmers of any part of the globe. India started first Comprehensive Crop Insurance Scheme from 1985 and this was effective till 1999. Participation in the scheme was voluntary scheme for loanee farmers (farmers who availed crop loans from commercial banks, regional rural banks and co-operative banks) for growing wheat, paddy, millets (including maize), oilseeds and pulses. Government of India terminated this scheme and started National Agricultural Insurance Scheme (Rashtriya Krishi Bima Yojana) from 1999-2000 and this scheme continued till 2015-2016. The scheme was available to all the farmers, loanee and non-loanee both irrespective of their size of holding. The scheme was implemented by 25 states and two Union Territories with coverage

of more crops and coverage of more risks. The scheme was demand-driven and moreover, claims were based on the occurrence of natural calamities. Government of India had constituted joint group to study the present crop insurance and to suggest improvement. On the basis of suggestion received, the new crop insurance scheme, Modified National Agricultural Insurance Scheme (MNAIS) was implemented on pilot basis in 50 districts from 2010-2011 to 2013-14 and implemented full-fledged from *rabi* 2013-14 to *rabi* 2015-2016 under the aegis of NCIP. The major improvements made in MNAIS were actuarial premium, with subsidy in premium ranging up to 75 per cent to farmers, unit area of insurance reduced to village/village panchayat level, indemnity for prevented sowing/planting risk and amp, for post-harvest losses due to cyclone in coastal areas, on account payment up to 25 per cent of likely claims as immediate relief, more proficient basis for calculation of threshold yield, minimum indemnity level of 80 per cent and 90 per cent etc.

To bring more farmers under the fold of crop insurance, a pilot Weather Based Crop Insurance Scheme (WBCIS) was launched from *kharif* 2007- *rab*i 2013-14 on pilot basis and further full-fledged upto *rabi* 2015-16. WBCIS aimed to provide insurance protection to the farmers against adverse weather incidence, such as deficit and excess rainfall, high or low temperature, humidity etc. which are deemed to impact adversely the crop production. The WBCIS was based on actuarial rates of premium. During pilot period, premium actually charged from farmers was restricted to at par with NAIS. National Crop Insurance Programme was formulated by merging the erstwhile pilot MNAIS and WBCIS with some improvements and approved for its implementation with effect from *rabi* 2013-14 season. Hence, the entire pilot based scheme that were being implemented till then were launched as a full-fledged component under the umbrella scheme NCIP with some improvements. NAIS was decided to be simultaneously discontinued. However, based on the representations from some States, NAIS was allowed to such States for implementation during *rabi* 2013-14. Again, all State Governments/UTs were given the option to implement either NAIS or MNAIS for the year 2014-15 and 2015-16.

Keeping in view the representations from States/UTs especially on account of increase in premium rates, farmers' share in premium, capping on premium rates and reduction in sum insured etc., NCIP/NAIS has been reviewed, and a new scheme namely, Pradhan Mantri Fasal Bima Yojana (PMFBY) has been approved in place of MNAIS/NAIS for implementation from *kharif* 2016 season. It replaced the National Agricultural Insurance Scheme and the Modified National Agricultural Insurance Scheme. The Weather-Based Crop Insurance Scheme (WBCIS) remains in place, though its premium rates have been streamlined with the latest scheme. PMFBY has more farmer-friendly provisions than its predecessors. It reduced the burden of premium on farmers significantly and expanded coverage. It also promoted the use of advanced technologies to estimate losses accurately and accelerate payments to farmers. The scheme provisions have been simplified for easy understanding and the maximum premium payable by the farmers will be 2 per cent for all *kharif* food and

oilseeds crops, 1.5 per cent for *rabi* food and oilseeds crops and 5 per cent for annual commercial/horticultural crops. Difference between premium and the rate of insurance charges payable by farmers are shared equally by the Centre and State. The scheme is implemented on an 'Area Approach basis'. The unit of insurance is village/village panchayat level for major crops and for other crops it may be a unit of size above the level of village/village panchayat. In case majority of the farmers in a notified area are prevented from sowing/planting the insured crops due to adverse weather conditions then insured farmers are eligible for indemnity claims up to maximum of 25 per cent of the sum-insured. Claims for widespread calamities are being calculated on area approach. However, losses due to localised perils (hailstorm, landslide and amp; inundation) and post-harvest losses due to specified perils, (cyclone/cyclonic rain and amp; Unseasonal rains) are assessed at the affected insured field of the individual insured farmer. Three levels of indemnity, viz., 70 per cent, 80 per cent and 90 per cent corresponding to crop risk in the areas are available for all crops. Improved technology like remote sensing, drone etc., is utilised for estimation of yield losses.

III

CROP INSURANCE IN INDIA: COVERAGE AND PREMIUM

The biggest challenge in front of India is to ensure protection measures against the crops loss because agricultural system of India is dependent upon several unpredictable factors. Government of India with the coordination of State Governments is making all possible efforts to increase the coverage of crop insurance but have not succeeded at the desired level. Table 1 indicates that a very small share of farmers cultivating different crops in both *kharif* and *rabi* seasons have insured their crops. The two most harvested cereals in country that is wheat and paddy were insured by less than 5 per cent cultivating farmers in India. The share of farmers who opted for crop insurance in the case of cotton and groundnut was slightly higher as

TABLE 1. INSURANCE COVERAGE AND PREMIUM PAID BY AGRICULTURAL HOUSEHOLDS FOR MAJOR CROPS IN INDIA: 2012-13

Kharif season			*Rabi* season		
Major crops	Insurance coverage (per cent)	Average premium paid (Rs.)	Major crops	Insurance coverage (per cent)	Average premium paid (Rs.)
(1)	(2)	(3)	(4)	(5)	(6)
Paddy	5.0	959.06	Paddy	3.9	1273.81
Jowar	7.9	910.48	Jowar	3.7	463.37
Bajra	6.2	1349.25	Maize	3.2	2137.00
Maize	4.6	559.15	Wheat	4.2	586.65
Arhar	8.2	549.60	Gram	11.5	379.99
Urad	7.1	185.58	Urad	1.0	1175.99
Moong	10.2	475.41	Moong	5.0	801.51
Groundnut	24.3	2794.84	Groundnut	10.0	300.00
Cotton	10.3	959.06	Cotton	3.9	1273.81

compared to other selected crops cultivated during the both seasons of agricultural years 2012-13. It can be seen that during the *kharif* season almost one-fourth farmers cultivating groundnut have been insured. It is interesting to note that insurance coverage of pulses cultivating farmers was the highest in the case of gram followed by moong, arhar and urad. The insurance coverage of other important cereals that is jowar, bajra and maize was also opted by less than 10 per cent of farmers cultivating these particular cereals. It is also important to note that the share of farmers who opted for crop insurance in the case of pulses was higher than the cereals in India.

Another important issue that needs to be highlighted is the average premium paid by agricultural households for major crops in India during the agricultural year 2012-13. Among the cereals crop highest premium paid was for the bajra during the *kharif* season and for maize during the *rabi* season. It may be observed from the above table that the average premium paid for cereals crop has huge variation during the two different seasons of agriculture and the same has been noticed for other crops also. In fact, in the case of groundnut the average premium paid by farmers during *kharif* season is nine times higher than the average premium paid by farmers during *rabi* season. It is interesting to note that in the case of cotton the average premium is less during the *kharif* season than the *rabi* season and percentage of insured cotton cultivation by farmers is high.

IV

CROP LOSS: CAUSES AND FINANCIAL VALUE

As per the latest data published by the Government, the harvest and post-harvest loss of India's major agricultural produce is estimated at Rs. 92,651 crore ($13 billion). The loss is almost three times as high as the new budget for the agricultural sector, which has seen an increase of 44 per cent from Rs. 24,909 crore ($4 billion) in 2015-16 to Rs. 35,984 crore ($5 billion) in 2016-17. An estimated 15-25 per cent of potential crop production is lost due this menace at a time when India needs not only to raise production but also ensure food security and nutrition for its growing consumption needs. There is a need to adopt a holistic approach with full involvement of the farmers. Crop protection and crop enhancement solutions, based on best global practices and the latest technologies available should be the answer. There are good emerging trends and solutions for sustainable crop protection which include crop protection chemicals, agronomy, fertigation, seed treatment, biotechnology development etc.

Government of India has collected information about the crop loss experienced by agricultural households for major crops in India during the *kharif* season of agricultural year 2012-13. The information has been tabulated above on various dimensions of crop loss, its financial value and possible causes of crop loss for different crops (Table 2). It may be observed that more than one-fourth crops cultivating farmers experience crop loss due to inadequate rainfall and drought. The other prominent causes for crops loss are diseases and insects, as indicated in the

table. It is very important to mention here that the average financial value of crop loss of some of the crops is very high, viz., cotton and groundnut.

TABLE 2. CROP LOSS EXPERIENCED BY AGRICULTURAL HOUSEHOLDS FOR MAJOR CROPS IN INDIA: *KHARIF* SEASON (2012- 2013)

Major crops	Per cent of agricultural households experience crop loss	Average financial value of crop loss (Rs.)	Causes of crop loss		
			Inadequate rain fall/ drought	Disease/insect	Others causes
(1)	(2)	(3)	(4)	(5)	(6)
Paddy	30.0	8,144.11	53.5	23.6	22.9
Jowar	50.8	12,445.43	76.5	10.8	12.7
Bajra	49.9	8,384.91	61.9	20.4	17.7
Maize	40.3	7,613.12	48.0	29.6	22.4
Arhar	41.4	9,674.04	72.4	10.9	16.7
Urad	49.6	6,121.74	37.8	41.7	20.5
Moong	60.1	10,579.22	61.6	17.2	21.2
Groundnut	55.5	28,413.02	79.9	8.8	11.3
Cotton	50.4	44,535.45	76.5	13.3	10.2

The crop loss experienced by Indian agricultural households for major crops during the *rabi* season of agricultural year 2012-13 has been discussed in Table 3. The percentage of agricultural households' experience of crop loss is very high in case of most of crops cultivated during the *rabi* season with major causes of crop loss being inadequate rain fall, drought and disease.

TABLE 3. CROP LOSS EXPERIENCED BY AGRICULTURAL HOUSEHOLDS FOR MAJOR CROPS IN INDIA: *RABI* SEASON (2012-2013)

Major crops	Per cent of agricultural households experience crop loss	Average financial value of crop loss (Rs.)	Causes of crop loss		
			Inadequate rain fall/ drought	Disease/insect	Others causes
(1)	(2)	(3)	(4)	(5)	(6)
Paddy	23.0	13,037.82	41.1	24.6	34.3
Jowar	59.0	13,237.82	93.7	2.4	3.9
Maize	30.8	17,286.96	42.8	40.6	16.6
Wheat	28.7	6,395.51	29.1	35.5	35.4
Gram	48.7	10,807.63	31.8	27.3	40.9
Urad	45.1	8,534.58	36.5	34.0	29.5
Moong	53.7	4,701.44	47.0	30.0	23.0
Groundnut	34.2	12,496.55	58.7	23.7	17.5
Cotton	31.0	5,091.13	29.8	64.5	5.7

V

COMPENSATION: TIMELINESS AND AMOUNTS

Government targets to compensate the farmers suffering more than one-third crop damage. According to laid down policy, farmers in rainfed areas are eligible to claim assistance in the form of input subsidy of Rs 6,800 per hectare, compared to the current Rs 4,500. Compensation for crops in areas with assured irrigation has been

increased from Rs 9,000 to Rs. 13,500 per hectare and that for perennial (horticultural) crops from Rs 12,000 to 18,000 per hectare. The relief is subject to a cap of two hectares per farmer. The states have also been asked to set aside 10 per cent of their SDRF for "local disasters" such as heavy rains and winds that normally do not qualify for claim assistance. The financial assistance is limited to 2 hectares per farmer, which means not more than 50 lakhs hectare out of the total 85 lakhs hectare would be covered. At an average of Rs.10,000 per hectare, the outgo is only Rs.5,000 crore, whereas states have already received Rs.11,079 crore as SDRF money for 2015-16. The 14th Finance Commission has awarded Rs.61,219 crore to states towards SDRF for five years ending 2019-20.

Crops insurance compensation received by farmers during the *kharif* and *rabi* seasons may be seen from Tables 4 and 5. It may be observed that majority of the farmers did not receive insurance claim in both the agricultural seasons, irrespective of the crops. Delay in getting the crops insurance compensation has multiple consequences and a challenge for the country like India, where agriculture is the principal source of livelihood for more than 50 per cent of the population. As per the latest data of home ministry, Government of India, the total number of suicides in the farming sector was 12,602 during the year 2015, which is 9.4 per cent of the total

TABLE 4. CROP COMPENSATION RECEIVED BY AGRICULTURE HOUSEHOLDS DURING THE *KHARIF* SEASON (2012-13)

Crops	Percentage of farmers received insurance claim on time	Percentage of farmers not received insurance claim on time	Percentage of farmers did not receive insurance claim	Average claim amount received (Rs.)
(1)	(2)	(3)	(4)	(5)
Paddy	2.7	8.7	88.6	3,025
Jowar	0.0	10.2	89.8	5,166
Bajra	11.5	13.3	75.2	2,157
Maize	0.0	10.2	89.8	1,000
Arhar	0.0	1.5	98.5	500
Urad	0.0	0.0	100.0	0
Moong	15.9	0.0	84.1	2,000
Groundnut	0.0	0.0	100.0	0
Cotton	8.0	0.0	92.0	2,000

TABLE 5. CROP COMPENSATION RECEIVED BY AGRICULTURE HOUSEHOLDS DURING THE *RABI* SEASON (2012-13)

Crops	Percentage of farmers received insurance claim on time	Percentage of farmers not received insurance claim on time	Percentage of farmers did not receive insurance claim	Average claim amount received (Rs.)
(1)	(2)	(3)	(4)	(5)
Paddy	0.6	5.1	94.3	16,612
Jowar	2.6	4.0	93.4	737
Maize	0.0	0.0	100.0	0
Wheat	0.0	0.0	100.0	0
Gram	13.2	0.0	86.8	2,545
Moong	0.0	0.0	100.0	0
Cotton	0.0	0.0	100.0	0

suicides that took place during the same year (NCRB, 2015). The average claim amount received by farmers for different crops is also very less in both the seasons of the agricultural year, which is a major concern for the Government. The reasons for delay in disbursal of crops insurance claim may be many. One possible reason could be the whole crops insurance system of India is not technology driven. The other possible reason for delay of crops insurance claim in India could be the education level of farmers or lack of knowledge of the Indian farmers.

The data given in the above two tables indicate that more than three-fourth Indian farmers did not receive crops insurance claim for the two most cultivated and consumable crops that is cereals and pulses. The farmers cultivating cereals and pulses insured these crops, paid premium with the hope to get a claim if crops fail, but the same did not happen. Why this is happening in India, needs a separate study and one has to dig further about the same. In the crop year 2016-17, when the monsoon rains had returned to normal after a back-to-back drought for two consecutive years, a total of Rs. 22,437 crore was paid to the insurance companies. Against such a huge premium, the crop loss claims finalised by the insurance companies, including 11 companies in the private sector, comes to Rs. 8,088 crore. Of this, Rs. 7,700 crore has been paid to the farmers. Even after the total claims finalised by these companies (Rs. 8,088 crore) is distributed, it still leaves the insurance companies with a staggering profit of Rs. 14,349 crore. (https://thewire.in/172303/crop-insurance-pmfby-farmers/).

VI

DISCUSSIONS AND CONCLUSIONS

In the above sections, an attempt has been made to throw the new idea of 4Cs related to crop insurance and accordingly assess with the help of large scale data collected by National Sample Survey office on situation assessment of Indian farmers. These 4Cs of Cost, Coverage, Compensation and Crop loss are important indicators and well accepted across the globe.

The first C related to crop insurance is cost which means the premium paid by farmers to insure their different crops in different agriculture sessions. The analysis reveals significant variation of premium paid to insured different crops during the *kharif* and *rabi* seasons. Another important revelation is in the case of groundnut the average premium paid by farmers during *kharif* season is nine times higher than the average premium paid by farmers during *rabi* season. The second C related to crop insurance is coverage which means the percentage of cultivating crop farmers insured particular crops. The analysis reveals that less than 5 per cent cultivating farmers insured wheat and paddy in India and in the case of cotton and groundnut; it was slightly higher. It was also observed that among pulses, gram was the highest insured and among cereals, jowar was highest insured, however, the share of farmers who opted for crop insurance in the case of pulses was higher than the cereals in India.

The third C related to crop insurance is crops loss which means percentage of agricultural households experience crop loss, its financial value and causes of crop loss during both the seasons in India. The analysis reveals that more than one-fourth crops cultivating farmers experience crop loss due to inadequate rainfall and drought. It was also found that the average financial value of crop loss of some of the crops is very high. The last C related to crop insurance is compensation which means claim amount received. The analysis reveals that more than three fourth Indian farmers did not receive crops insurance claim for the two most cultivated and consumable crops that is cereals and pulses.

The Indian government's flagship crop insurance scheme, PMFBY, faces a host of problems including delayed payment of claims and declining enrolment numbers. In the light of this, the Indian government has moved to penalise insurers and state governments for delaying payments and imposed enrolment targets on insurance companies. The Indian government has also increased the risks that can be covered under the scheme. The Indian government's flagship crop insurance scheme, the Pradhan Mantri Fasal Bima Yojana (PMFBY), was launched with great fanfare in 2016. Under the scheme, farmers were required to pay only 2 per cent of the premium expenses, with the rest being borne in equal measure by the central and state governments. However, it has not exactly been the success story as it was envisioned to be. The problems are manifold. State governments have not transmitted data to insurers on time, claims payments have been delayed, sometimes for as long as 18 months, and enrollment numbers are declining. Around 48.4 million farmers signed up for the scheme in 2017-18, a 16 per cent drop from the previous year.

In the light of this, the government has announced a number of changes to the scheme with the view of resolving the aforementioned problems. The first action is punitive in nature. The government has said it will penalise insurance companies and state governments for the delayed payment of claims. While insurers will face a 12 per cent interest penalty if they do not settle with farmers within two months of the prescribed deadline, state governments will also be hit with a 12 per cent charge if they do not transfer subsidies to insurers within three months. Secondly, the government has also imposed enrollment targets on insurers. They will be required to increase enrollments of non-loanee farmers by 10 per cent on an annual basis. Unlike loanee farmers, non-loanee farmers do not receive subsidised crop loans as a result of a pre-existing scheme. Thirdly, to increase awareness of the programme, insurance companies have to spend 0.5 per cent of the revenue earned in gross premiums on advertising and publicity for the scheme. The government has effectively outsourced its responsibility of promoting its own programme. Finally, the Indian government has also increased the risks that can be covered under the scheme.

Farmers will now get coverage for hailstorms, crop fires, damage from animals, landslides and rainstorms. More importantly, farmers will now get 72 hours instead of 48 hours to inform state governments about crop damage. Earlier this year, in February, the Ministry of Agriculture also launched an online portal for the scheme.

The new portal was developed to facilitate a quicker settlement process by streamlining communication between state governments and companies as well as resolving discrepancies and lapses. The data collected was restricted to certain indicators, which can be enhanced in further, so that a very clear insight can be obtained. Further state specific results are important, which is as of now not possible with this data set because of lack of adequate sample size at state level.

Received October 2018. *Revision accepted June 2019.*

REFERENCES

Government of India (2014), "Key Indicator of Situation of Agricultural Households in India", January-December 2013, National Sample Survey Office, Ministry of Statistics and Programme Implementation.

Government of India (2015), "Some Characteristics of Agricultural Households in India", January-December 2013, National Sample Survey Office, Ministry of Statistics and Programme Implementation.

Government of India (2016), "Some Aspects of Farming in India", January-December 2013, National Sample Survey Office, Ministry of Statistics and Programme Implementation.

National Crime Records Bureau (NCRB) (2015), *Annual Report – Accidental Deaths and Suicides in India 2015*, Ministry of Home Affairs, New Delhi.