

**STUDY ON THE AGRICULTURAL SECTOR IN INDIA****A. RAVI PRAKASH REDDY**

Research scholar

Department of economics

Sri Venkateswara University. Tirupathi

**D.KRISHNA MURTHY**

Professor

Department Of Economics.

Sri Venkateswara University. Tirupathi.

**ABSTRACT**

In India, agricultural productivity and farm revenues are frequently impacted by natural catastrophes such as drought, floods, cyclones, storms, landslides, earthquakes, and other such calamities. The emergence of epidemics and man-made disasters such as fire, the sale of bogus seeds, fertilizers, and pesticides, price crashes, and other factors all contribute to the increased susceptibility of agriculture to these types of natural disasters. All of these events, which are beyond the control of farmers yet still have a significant negative impact on farmers due to losses in productivity and income from farming, The degree of loss that can be attributed to unfavorable occurrences is expanding in magnitude in tandem with the increasing commercialization of agriculture. Recent times have seen the establishment of several methods, such as contract farming and futures trading, which are anticipated to provide some degree of insurance against price changes, either directly or indirectly. However, crop insurance is seen as a significant mechanism because of its ability to successfully mitigate the risks to output and income that are caused by a variety of natural and manufactured occurrences.

**KEYWORDS:** - *Agricultural, Insurance, Crop***INTRODUCTION**

India's current economic growth may be traced back in large part to the contributions made by its agricultural sector. Agriculture not only feeds a country but also employs its citizens, contributes raw materials to the market for manufactured goods, and brings in foreign currency. The expansion of a nation's agricultural sector is an essential component of the nation's overall economic growth. Although agriculture's contribution to the world economy was relatively insignificant, it continues to play an important role in the lives of a great many people. 19% of the world's population was actively engaged in farming in 2012, yet agricultural and allied sectors produced only 2.8% of the overall income, according to reports from the World Bank.

Agriculture and other closely related industries were responsible for approximately half of India's total national GDP. The agriculture industry provided employment for close to 72 percent of the overall working population. In India, over two-thirds of the population relies on agriculture as their primary source of income to support themselves. Due to the fact that the vast majority of Indians make their homes in the country's rural areas, the agricultural sector will inevitably play a significant role in India's future economic growth. The percentage of the gross domestic product that is contributed by the agriculture sector has fallen from 26.2% in 2000-01 to 21.7% in 2005-06. In addition, the rate of increase has been erratic, going from 0% in the year 2000-01 to 5.9% in the year 2002-03, reaching 9.3% in the year 2003-04, and then falling back down to 0.6% in the year 2004-05. The primary reason for this is a fall in production, despite the fact that around 65.70% of the population relies on agriculture for their livelihood. Despite the fact that India's

agricultural sector has been contributing less to GDP in recent years, this industry is still the country's primary driver of economic growth. This provides more evidence that the economy of India at the time of its independence was predominately agricultural in nature. The percentage of total national income contributed by agriculture has decreased from fifty percent in the years following the country's independence to eleven and a half percent in the most recent fiscal year. However, even in the modern day, the agricultural sector employs more than 70 percent of the labour force. To a greater or lesser extent, the expansion of other industries and the general economy is contingent, directly or indirectly, on the performance of the agricultural sector. As a consequence, the agriculture industry plays a preponderant part in the Indian economy.

Since its independence, India has made significant strides forward in the field of agriculture. During the fifty years leading up to India's independence, the country's agricultural sector expanded at a rate of approximately one percent per year; however, since the country gained its independence, the sector has expanded at a rate of approximately 2.6 percent per year. The primary driver of this expansion during the years between the fifties and the sixties was the country's increased land area. After that, the contribution of increased land area under agricultural production has gradually decreased over the course of time, and increases in agricultural productivity have emerged as the primary driver of overall increases in agricultural output. One more significant aspect of the advancements made in agriculture is the reduction or elimination of the sector's reliance on the importation of food grains. Not only has there been an increase in the output and yield of Indian agriculture, but the structural changes that have taken place have also contributed to this growth. The Indian government has been responsible for a number of the positive changes that have occurred in the country's agricultural sector recently. Land reforms, the establishment of an Agricultural Price Commission with the goal of ensuring remunerative prices to producers, the implementation of a new agricultural strategy, investments in research and extension services, the provision of credit facilities, and the enhancement of rural infrastructure are some of the steps that are being taken. In spite of these advancements, the situation in the agricultural sector became unfavourable during the period following the WTO, and this trend encompassed all of the agricultural sub sectors. The rates of expansion in the production of all crops slowed down. It has not been seen for such a long period of time as it has been seen in recent years that the growth of agricultural output has slowed down. The recent slowdown in growth, along with increased volatility in the growth rate, is indicative of the increase in vulnerability that has occurred in agricultural income at the macro level. In 2007-2008, the state and the country began implementing the Eleventh Five-Year Plan, with a primary emphasis on addressing the agrarian crisis that had arisen.

## **OBJECTIVES**

1. To do research on the state of the agricultural industry in India.
2. In order to define the part that the government plays in the establishment of insurance programs.

## **The Meaning of Crop Insurance and Insurance in General**

Insurance is a contractual agreement whereby one party assures another party or institution that they would refund the compensation of an accident or damage rather than a specific sum of money. This agreement is made between two parties. Insurance can refer to either a product that offers protection against a potential occurrence or the payment of money to an insurance company or another entity in the event of damage, injury, or any other such occurrence. Therefore, reimbursement against an agreement is what insurance is. In the insurance contract, the party that ensures the other party will get their money back is referred to as

the insured, while the party that makes the guarantee to refund the compensation is referred to as the insurer. An insurance policy is the name given to the agreement that exists between the insurer and the insured. The insured person makes a pact with the insurer to pay a certain sum of money on a regular basis. This payment is known as the premium.

Crop insurance is an important measure or instrument that farmers employ to mitigate the financial losses caused by various sorts of natural disasters or dangers that damage and demolish the production. These losses might occur when the produce is damaged or destroyed.

It is also one of the important instruments that a farmer can use to stabilise his income against the possibility of partial or complete crop failure due to unfavourable weather [such as disasters, flood, hail, drought, etc.] or due to related unfavourable physical crop conditions that are outside of his control.

### **Why is it Called "Crop Insurance" as Opposed to "Crop Loan Insurance"?**

Before the widespread availability of crop insurance, farmers were required to obtain crop loans from a variety of financial institutions, more formally known as formal credit institutions. These institutions included commercial banks, regional rural banks, and cooperative credit institutions, among others. Therefore, they became farmers on loan. There were no facilities for crop insurance to be found. In that scenario, there was no possibility of obtaining or recovering indemnity from the insurer in the event that the crops were harmed by natural disasters. Due to the devastation done to their crops, they found themselves in a debt trap.

After the implementation of crop insurance scheme (the Comprehensive Crop Insurance Scheme (CCIS) was introduced in Indian agriculture from 1st April 1985 over all India and the National Agricultural Insurance Scheme (NAIS) or Rashtriya Krishi Bima Yojana (RKBJ) has been running well for the session 2000-2001 with the active assistance and agreement of the West Bengal Government (W.B Govt.) in the state of West Bengal), all the loanee farmers are compulsorily insured and in accordance with its own indemnity paid rule, the National Agricultural Insurance Scheme (NAIS) makes the payment of the indemnity to the affected farmers.

Compressive Crop Insurance Scheme (CCIS), National Agricultural Insurance Scheme (NAIS) or Rashtriya Krishi Bima Yojana (RKBJ), Seed Crop Insurance Scheme (SCIS), Firm Income Insurance Scheme (FIS), Rainfall Insurance Scheme (RIS), and Weather Based Crop Insurance Scheme are some of the crop insurance programmes that have been implemented in the field of Indian agriculture. These crop insurance programmes are designed to protect farmers in the event of a natural disaster (WBCIS).

Depending on the different types of crops, the crop insurance programmes can be run using either an area approach, an individual approach, or a pilot basis. The Compressive Crop Insurance Scheme (CCIS) and the National Agricultural Insurance Scheme (NAIS) are two of the crop insurance schemes that are operated on the basis of an area approach. In addition, the NAIS operates on an individual approach for localised disasters. The remaining crop insurance schemes are followed on a pilot basis. In the event of a crop insurance plan that takes an area-based approach, the unit of area could be a district, subdivision, block, or gramme panchyat. In the beginning of the crop insurance plan in India, there is not a predetermined region that serves as the unit. As a direct result, a number of issues were discovered. • Subsequently, the district was selected as the unit of area; this was followed by its extension to the subdivision and the block; ultimately, •it makes an effort to manage its extension to the gramme panchyat level.

## 1. Crop Insurance Scheme's Goals and Objectives

The following are the goals of the crop insurance scheme:

- In order to protect farmers from the risk of losing their crops [declared affected crops] as a result of natural disasters such as hail, drought, and floods, etc., or from the risk of losing revenue as a result of a decline in the prices of agricultural commodities, the purpose of this legislation is to provide farmers with insurance.
- Aiming to persuade farmers to use innovative agricultural practises, high-yielding seeds and fertilisers, and cutting-edge technological tools in order to improve agricultural production.
- In order to maintain a consistent level of income for the farmers throughout the years of natural disasters.

### Aspects of Crop Protection Insurance

A. Included Crops The following types of crops are considered eligible for participation in the scheme:

#### Rabi Crops:

- Boro rice, Wheat, etc.
- Pluses: Musur, Arhar, Mung, Gram, and Maskalai, etc.
- Oil Seeds: Mustard, Linseed and Til, etc.
- Potato.

#### Kharif Crops:

- Aman Rice, and
- Aus Rice

### B. Farmers Who Work in Integration

The crop insurance programme is open to any and all farmers, such as share croppers and tenancy farmers, who will cultivate notified crops within the notified area and who wish to participate. Farmers can participate in such a programme in either a mandatory or voluntary capacity, depending on their preferences.

- The obligatory foundation: Loanee farmers are farmers who will cultivate crops that have been notified by the government and will also collect loans from financial institutions for seasonal agricultural purposes. Loanee farmers are automatically compulsorily insured.
- Voluntary basis: Every other farmer who grows the crops that have been informed but does not collect a crop loan is required to have a bank account. Farmers who do not get loans are referred to as non-loanee farmers, and as a result, they belong to the voluntary basis. (For further information on this topic, see page 25 of the National Agricultural Insurance Scheme's Scheme and Guidelines.).

**C. Risks That Are Insured for and Those That Are Not**

- a natural blaze and a lightning strike,
- Storm, Hailstorm, Cyclone, Typhoon, and Tempest are all synonyms for "Storm."
- Hurricane, Tornado,
- Disasters such as flooding, inundation, and landslides
- Dry spells, draughts, and droughts
- Insects, pests/Diseases etc.

However, losses incurred as a result of war, nuclear risk, malicious damage, or any other risk that could have been avoided shall not be included.

**D. Premium Subsidy**

Small and marginal farmers will each get a grant equal to a percentage of the premium. The premium for Small and Marginal farmers is subsidised to the extent of 10 percent, and this cost is split between the government of India and the government of the state in which the farmers are located.

**E. Indemnity, in addition to Custom**

All of the affected loanee farmers will be eligible for compensation for their losses if the Actual Yield (A Y) of the crops that were notified in an area is lower than the Threshold Yield (TY) that was specified.

**HISTORICAL BACKGROUND****i) Initial Scheme for the Individual Approach, 1972–1978**

Since 1972–1973, when the General Insurance Corporation (GIC) of India introduced a Crop Insurance Scheme on H-4 cotton, and later included groundnut, wheat, and potato, various forms of experiments on agricultural insurance have been conducted on a limited, ad-hoc, and scattered scale. These experiments began around the same time. Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Tamil Nadu, and West Bengal were the states in which the Scheme was put into action. It lasted until 1978–1979, during which time only 3,110 farmers were protected by it at a cost of 4.54 lakh rupees per acre for claims totaling 37.88 lakh rupees.

**ii) The Pilot Crop Insurance Scheme (PCIS) was in effect from 1979 until 1984.**

The General Insurance Corporation (GIC) initiated the Pilot Crop Insurance Scheme in 1979. This programme, which provided insurance coverage against a deficit in crop yield that was lower than the threshold level, was based on the "Area Approach." The loanee farmers of institutional sources were the only people who could participate in the Scheme, and they did so on a voluntary basis. The Scheme encompassed cereals, millets, oilseeds, cotton, potato, and chickpea. The PCIS 1979 was put into effect in 12 states until 1984-85 and insured 6.23 lakh farmers for a premium of 195.01 lakh rupees against claims totaling 155.68 lakh rupees over the entire duration.

**iii) The Comprehensive Crop Insurance Scheme (CCIS) was in operation from 1985 to 1999.**

The Comprehensive Crop Insurance Scheme (CCIS), which began operations in 1985, was the very first scheme to cover the entire country. Previous schemes were either pilot projects or experimental in nature, carried out on a limited scale and in a dispersed fashion. The 'homogenous area strategy' served as the conceptual underpinning for this plan, which was connected to the provision of short-term loans. During the 1985-1986 school year, the Central Government initiated the CCIS programme. Up until the Kharif 1999 season, the Scheme had been taken on by a total of 15 states and 2 union territories (UTs). Farmers who had acquired seasonal agricultural loans from financial institutions were the only people eligible to participate in either the PCIS or the CCIS. The primary distinction between the PCIS and the CCIS was that participation in the former was entirely voluntary, whilst participation in the latter was obligatory for loanee farmers. The CCIS provided coverage for 763 lakh farmers at a cost of Rs. 404 crore in premiums, which was applied to claims totaling Rs.

In 1999, a more inclusive programme known as the "National Agricultural Insurance Scheme" was introduced with the intention of providing protection for all farmers, regardless of whether or not they had received a loan.

**Agricultural Risk Management and Insurance Program**

The National Agricultural Insurance Scheme (NAIS) is the crop insurance scheme that is sponsored by the government and has been in operation in the country since the Rabi 1999-2000 season. It is being implemented in the country as part of risk management in agriculture with the goal of providing financial support to the farmers in the event that their crops fail as a result of natural disasters, pests, or diseases. The Agriculture Insurance Company of India (AIC) Ltd. is the organisation responsible for putting the scheme into action. No of the size of the farmers' holdings, the programme is open to participation from all of the farmers, both loanees and non-loaneees alike. It is planned to cover all of the food crops (cereals, millets, and pulses), oilseeds, and annual commercial and horticultural crops for which yield data from previous years is available for an adequate number of years. This will ensure that the plan is successful.

The premium rates are as follows: 3.5% of the total sum insured for bajra and oilseeds; 2.5% of the total sum insured for other Kharif crops; 1.5% of the total sum insured for wheat; and 2% of the total sum insured for other Rabi crops. Actuarial rates are being applied when it comes to the cultivation of commercial and horticultural crops. At the moment, small and marginal farmers are eligible for a subsidy that amounts to ten percent of the premium that is charged from them. This payment is split fifty-fifty between the state and federal governments. The programme is run using the "Area Approach," which entails defining specific regions for each of the listed crops. These defined areas can be a block, tehsil, mandal, firka, circle, or gramme panchayat, for example.

At the moment, the programme is being carried out in a total of 24 states and 2 union territories. During the past 25 crop seasons (i.e. from Rabi 1999-2000 to Rabi 2011- 12), around 1930 lakh farmers have been covered in an area of approximately 2919 lakh hectares, and they have insured a sum that amounts to approximately Rs 256065 crore through the scheme. Claims totaling around Rs. 25001 crore have been paid or are still owed against the premium amounting to approximately Rs. 7565 crore, which will benefit approximately 518 lakh farmers (upto Rabi 2011-12 season).

**CONCLUSION**



We need to implement agricultural insurance fiscal subsidy policies that are scientifically differentiated for regions that are at different stages of economic development. These policies should be differentiated according to factors such as the scale of agricultural production, the financial basis, and the agricultural output of each region. At the same time, we should reduce the proportion of agricultural insurance fiscal subsidy for developed regions where local governments and commercial institutions are capable of developing agricultural insurance and are motivated to do so. In these developed regions, agricultural insurance can be developed on its own. We will allocate a greater portion of our available financial resources toward the expansion of the agricultural sector, which will serve as the primary pillar. This expansion will be the primary focus of our efforts. In areas that are severely impacted by poverty, have economic growth that is relatively behind the times, and insufficient financial resources on the local level, the appropriate action should be taken in accordance with the local circumstances.

## REFERENCES

---

1. Miraj Ahmed Bhuiyan (2022) The impact of agricultural insurance on farmers' income: Guangdong Province (China) as an example PLoS One. 2022; 17(10): e0274047. Published online 2022 Oct 10. doi: 10.1371/journal.pone.0274047 PMID: 36215253
2. Yiran Li (2021) Analysis on the effect of farmer income of policy-based agricultural insurance Volume 72, 2022 - Issue 1 Pages 386-400 | Received 12 May 2021, Accepted 09 Nov 2021, Published online: 17 Jan 2022
3. Chambers R.G, Q. J. (2011). Decomposing input adjustments under price and production uncertainty. Blackwell Science .
4. Skees J, H. P. (2010). New approaches to agricultural insurance in developing countries
5. Ghorbani H, D. J. (2011). Efficient factors on adoption of agricultural crops insurance. Agricultural scientific research Journal, 2 (8), 79-84.
6. J, T. (2012). Efficiency of Wheat Insurance. Agricultural Economic Institution, Iran.
7. M.J, B. (2012). An analysis of crop insurance scheme in Karnataka. Institute for Social and Economic Change, Bangalore.
8. Wenner.M, A. (2003, June). Challenges in Implementing agriculture Insurance and Reinsurance in Developing Countries. 14-23.
9. Agahi.Hand, A. B. (2018). African Journal of Agricultural Research, 3 (9), 601-604.
10. Webster, O. S. (2019). Econometric Analysis of the impact of agricultural insurance on farming system in the middle belt. African Journal of Agricultural Nutrition and Development, 9 (6).
11. Iturrioz, R. (2019, November). Agricultural Insurance. Primer .
12. Rosendahl, A. (2019). Agricultural Risk Management.