

A Report on Agricultural Insurance in India and the Rise of NAIS

Narendra Nath Saxena

SOA, Sanskriti University, Mathura,

Uttar Pradesh, India

Email Id- narendra.ag@sanskriti.edu.in

ABSTRACT

In general, Crop production is concerned with monsoon adaptability. As a consequence, promoting different cultures involves operational risks. Natural disasters have the ability to impair agricultural production. Crop insurance is simply a method that may be used to protect against production risks in farming, and some preparation is needed to conceal any potential threats. The Indian government has tried with and worked on creating various crop insurances schemes to meet this requirement. The National Agricultural Insurance Corporation of India has been operating the National Agricultural Insurance Scheme (NAIS) since 2000. All of these suggestions, however, remained on paper, and the government's crop insurance policy was not modified. The aim of this research study is to look at the growth and development of the national agricultural insurance system, as well as the key characteristics and advantages of NAIS. As a consequence, knowledge and proper implementation of the crop insurance system may assist Indian farmers to increase food output while reducing the risk of crop failure.

Keywords

Crop Insurance, Insurance System, National Agricultural Insurance, Risk Management.

1. INTRODUCTION

Agriculture has contributed substantially to India's economic development. Currently, agriculture employs 70 percent of the country's people, but agriculture in India is usually linked with a changeable monsoon. As a consequence, there's a risk that different harvests may be mismanaged. Natural disasters may affect the agricultural sector's operations. Crop insurance is currently the only instrument available to avoid production risk in agriculture, and considerable preparation is needed to conceal any potential risks. The Indian government reacted by creating the First Individual Access Program, the Pilot Crop Insurance Scheme, the Comprehensive Crop Insurance Scheme, the Pilot Crop Insurance Program, and other crop insurance programmes to meet this need. Significant efforts have been made to establish various programmes, including the Pilot Program for Plant Seed Insurance and the National Agricultural Insurance Programs [1].

1.1. Objectives of the Study

- Examine the national agricultural insurance system's growth and development.
- A study of the national agricultural insurance system's main features, advancements, and benefits.
- Researchers offer suggestions for ways to enhance the program's efficacy [2].

1.2. Scope and Limitations of the Study

The emphasis of this study is limited to the National Agricultural Insurance Scheme of India from Rabi 1999-2000 to Rabi 2008-2009. The current emphasis of this study is limited to the National Agricultural Insurance Program's growth and effectiveness. This study depends largely on secondary data [3].

Researchers used the case study method in this article. The aim of this research was to examine at how the national agricultural insurance system developed and functioned over the period of 19 Clergy seasons, from 1999-2000 to 2008-2009. This is mainly based on secondary data, although it is supplemented by interviews with farmers' banks, insurance companies, academics, and other stakeholders [4].

2. LITERATURE REVIEW

J. Iffstated in the article that, as part of a comprehensive crop insurance program, the Indian government started providing a broad variety of covered crops. The National Agricultural Insurance System has assumed the role of the Comprehensive Crop Insurance Scheme (CCIS) (CCIS). NAIS is a step up from CCIS, but it merely replaces the faulty system with one that has a somewhat lower number of faults. State crop insurance has been proven all over the globe, yet India seems to be blind to its own and other countries' insolvency. The goals in terms of economic feasibility, their binding nature, the inability to manage adverse selection, arbitrary bonuses, and the regional approach are the main faults of NAIS. Private crop insurance is undeveloped worldwide, but there are a few successful private schemes. Even if India withdraws from the crop insurance scheme, it may still assist farmers by giving income guarantees and investing in infrastructure. Floods, droughts, pests, and a range of other natural catastrophes affect farmers. Their greatest adversary is time, which mankind will never be able to control. Agriculture, on the other hand, has been practised since cavemen turned spears into hoes and since then agriculture has gone a long way while farmers, on the other hand, remain unmoved. In today's agricultural climate, crop insurance is a risk management technique that farmers may use. Farmers may transfer risks related to weather conditions to a third party in return for premiums nevertheless, farmers in India have been insured since 1972. Despite the fact that all of the plans are flawed, the Indian government continues to strive to improve agriculture by protecting it from the elements. It is fairly unusual in India for the government to refuse to offer public crop insurance. Government crop insurance programs in both emerging and wealthy countries have suffered significant losses if however, do not provide an adequate product. The inadequacy of such a system has long been demonstrated. On the other side, private insurance is accessible to the maximum degree possible, and no subsidised insurance is available.

Farmers will benefit more from private insurance since there is more competition. The National Agricultural Insurance Policy, the government's most current crop insurance policy, has only been in operation since the 1999-2000 agricultural season. Within five years, NAIS is expected to be viable in terms of crop insurance. Farmers are charged premiums based on exchange rates and administrative costs that are established. The NAIS database could not be examined because the data was only available for two seasons. However, the previous crop insurance system's shortcomings, as well as the general agricultural trend[5].

S. S. Rajuet *al.* presented in the article that agriculture's production and income in India are both at risk. Crop insurance is the only method to protect yourself against production risks. In light of this, this paper evaluated the features and benefits of the country's National Agricultural Insurance System (NAIS) and suggested some changes to make it more effective. NAIS has a rather low coverage in terms of area, number of farmers, and value of agricultural output. Existing coverage levels must be raised by at least 3-4 times for crop insurance programs to become a major tool for agricultural risk management. Only if the insurance coverage includes renovations and expansions is this kind of extension feasible. The proposed improvements will have a financial effect as well as an impact on the insurance operations that will be affected. This would require additional government efforts to establish appropriate institutions and provide financial support for crop insurance. However, expand coverage and strengthen the long-term sustainability of the long-term insurance plan by giving similar assistance to private insurers. According to research, a sufficient portion of farm insurance may be provided to different general insurers throughout the nation, which may be equal to the share of agricultural income in the first place[6].

3. DISCUSSION

3.1. Evolution of Agricultural Insurance in India

Soon after the nation achieved independence in 1947, the subject of creating a crop insurance system was explored. In this regard, the Department of Food and Agriculture of the Central Parliament made certain to implement 'crop insurance' crops and animals for the state, and the study was carried out in 1947-48. In 1965, the government enacted a crop insurance law that required the model crop insurance system to be cycled around the countries' governments and seek for their feedback. No state, however, supported this system due to extremely significant financial obligations. The comprehensive insurance division of General Life Insurance Corporation of India introduced the first insurance company crop insurance plan on a trial basis in 1972. In Gujarat, the aim is to target H-4 cotton in a few places. It lasted from 1978 to 1979, and only 3,110 farmers were covered, with a premium of Rs. 4.54 for a claim of Rs. 37.88. In 1979, the General Insurance Corporation of India started a pilot crop insurance scheme. Farmers got the Rs. 623,000 incentive under the scheme, which was conducted in 12 states until 1984 for which bills cost 195.01 lakh rupees. The experts recommended a credit-linked crop insurance system as an institution (crop loans according to a regional strategy). For kharif in 1999, Dandekar had set in place a scheme called the Comprehensive Crop Insurance System, which guaranteed farmers Rs.7.63 million and a 404-rupee fee for claims. A prototype crop insurance program was established in 14 regions across five states in 1997. The insurance money in this plan is targeted at Rs.1.72 crore 4.78 lakh farmers, the bill paid was Rs. 2.86 per premium rate of Rs. 39.78 crore(6).

3.2. National Agricultural Insurance Scheme

The National Agricultural Insurance System was established by the Government of India in collaboration with the Government of India General Insurance Corporation (GIC) in the 1999-2000 crop season. The Agricultural Insurance Company of India Ltd (AICIL) was established in December 2002 and started operations in April 2003, when it took over the implementation of the National Agricultural Insurance System (NAIS)[7].

3.3. Salient Features of the NAIS

- The crops that are eaten as part of a diet: sugar cane, potato, cotton, ginger, onion, turmeric, chilli, cilantro, cumin, jute, tapioca, banana, pineapple, oilseeds, and annual/plant money are all edible grains.
- NAIS programs are accessible and no farmer loans.
- NAIS is a regional approach to generic catastrophes and a specialized approach to local disasters such as hail, landslides, tornadoes and floods.
- The following are the rates that apply to all policyholders: the national and state governments are said to divide the 50 present premium grant equally. Special subsidies have been cut down, leaving small and marginal farmers with just 10 present of the overall subsidy[8].

3.4. Analysis & Interpretation

This article seeks to analyse the national agricultural insurance system's growth and performance over the course of 19 seasons, from Rabi 1999 to Rabi 2009 also looked at the NAIS's growth and development.

From Rabi 1999 to Rabi 2009, the growth rates depiction of India's national crop insurance scheme for the Rabi and Kharif seasons. Only nine states and Union Territory took part in the program at initially. Only 58,000 farmers are insured by this plan, with a premium of Rs. 5 crores paid out against a claim of Rs. 7.7 crore. NAIS coverage has increased significantly since Rabi 1999-2000, but when the number of seasons for Rabi and Kharif are compared, Kharif's seasonal coverage is greater than Rabi's. The reason for this is that farmers are covered from April 1st to June 30th during the kharif crop. Due to limited rainfall in regions like Maharashtra and Andhra Pradesh, crops need protection. As a consequence, during the kharif harvest, farmers have chosen crop insurance. The NAIS has not increased substantially since 2005-06, according to this data. Non-lending and loan farmers must now engage in the scheme, which was needed for non-lending farmers throughout the period. NAIS insured 1345.69 lakh farmers at a premium of Rs. 428 on a debt of Rs. 15,230.5 between 2000 and 2009[9].

For the entire period, farmers' average yearly growth rate was 41.87 percent. Coverage rose by 37.74 percent. Beneficiary breeders increased at a pace of 58.12 percent on average, while permitted claims climbed at a rate of 69.78 percent on average. Only nine states participated in NAIS in Rabi 1999-2000. However, as stated, the initiative has been implemented in 26 states since 2005-06. In addition, the scheme covers 1345.69 farmers in 26 states, with Maharashtra accounting for 19.03 percent of the total and Andaman & Nicobar ranking top. With just 1000 farmers, the island will be the last. Madhya Pradesh (20.26 percent) was the first state to be acknowledged in the coverage area, followed by Maharashtra (19.03 percent), Andhra Pradesh (15.96 percent), Rajasthan (10.17 percent), and Uttar Pradesh (11.19 percent). These six states encompass 2109.16 hectares, or 76.61 percent of the total land area. Andhra Pradesh contributed for 17.07 percent of total income, Maharashtra 9.73 percent, Gujarat 19.97

percent, Karnataka 9.23 percent, and Tamil Nadu 7.69 percent[10].

As a consequence, these five states account for 56 percent of all documented complaints. In contrast to other states, Andhra Pradesh, Gujarat, Uttar Pradesh, Karnataka, and Rajasthan dominate the implementation of NAIS, according to the Maharashtra. From Rabi 1999-2000 to Rabi 2008-2009, displays the NAIS claim premium ratio. For the period covered under this plan, total claims accepted was Rs. 151230.45 crore and the total premium paid under this scheme was Rs. 4428 crore. The claims premium ratio is 3.44, which is the ratio of total claims to premium. It is clear that claims paid out surpass 3.5 times the premium collected. As a consequence, even without accounting for administrative expenses, this approach loses a lot of money. In the years 2000-01 and 2002-03, the ratios were 5.46 and 5.53, respectively, showing that claims were more than 5 times the premium collected the aforesaid period.

The claims-to-insurance ratio from 1999-2000 to 2008-2009 shows, according to the Rabi NAIS. The whole insurance amount is Rs.148278, with Rs.15230.45 in approved claims and 10.27 percent of the total insurance amount awarded. This percentage ranges from 2.16 percent to 17.86 percent. The premium/guarantee ratio, on the other hand, is $(939 \text{ crore}/148278 \text{ crore}) \times 100 = 0.63$ percent. This indicates a loss of 9.63 percent of the guaranteed exit value.

From Rabi 1999 to Rabi 2009, shows the NAIS grant or bonus percentages. The grant-to-bonus ratio ranges from 4.52 to 34 percent. With the exception of 2008-09, the benefit rate decreases every year. As a consequence, the benefits decrease with each passing year. From 1999-2000 to 2008-2009, the ratio of recipient farmers to the NAIS members is shown beneficiary farmers outnumbered insured farmers by a margin of 10.34 percent to 43.58 percent. This shows that the NAIS helps a significant number of farmers. A total of 43.58 percent of farmers benefited in 2003. This is the highest percentage in the previous time period.

3.5. Findings

- Farmers confront the challenges of drought, pests and other natural catastrophes when agricultural insurance needs risk management, which is a catalytic instrument.
- Bad weather is a big adversary of Indian farmers and weather circumstances are not in the hands of farmers and are out of control. Therefore, crop insurance is a risk management strategy that farmers may utilize in today's agricultural environment.
- Since 1972, the Government of India has tried to safeguard farmers by establishing different crop insurance programs. As a consequence, farmers have crop insurance choices, however all crop insurance policies are problematic.
- Commercial banks are not completely performing their designated function, which negatively impacts the whole crop insurance procedure. The list of policyholders was delayed since the bank collected and aggregated the premiums and did not immediately pay the bank on time.
- Monthly departmental coordination meetings are not held in line with the processes needed at the district level.
- Co-operative banks do better compared to commercial banks. Coordination between departments is extremely weak. This method is a multidisciplinary technique that needs tight cooperation across various departments.

- However, Economic Equity must complement each other's efforts and a lack of coordination may impede the entire process.
- Commercial and cooperative banks play a significant role in the execution of the NAIS, in particular in the payment of compensation to affected and affected farmers.
- The service charge was paid because the bank was reluctant to conduct business.
- In the event of an agricultural loan, the banker is the direct beneficiary of the crop insurance since the farmer's allowance is paid straight to the farmer's loan or bank account.
- Even 10 times after the commencement of the program, farmers were not aware of their strategy. By default, only Kisaan borrowers and credit card holders are protected, although non-borrowers know nothing about the scheme. NAIS is now an option for both borrowers and non-borrowers.
- Bankers and agricultural organizations have failed to persuade farmers to use crop insurance.
- The difference between premium paid and claim amounted to Rs. 10802.5 crore from Rabi19992000 to Rabi200809.
- Only 5 out of the 26 states earn more than what is required and which is not very significant.
- NAIS award rates range from 1.5 to 3.5 depending on the season. The premium is greater than the CCIS and earlier programs, yet this premium is still not enough to cover the loss.
- Many farmers are unfamiliar with crop insurance owing to illiteracy. Therefore, it is essential to organize advising camps at local level to increase awareness among farmers. However, must have a comprehensive knowledge of the crop insurance system.
- Crop Insurance of India is working for the state government, national government, National Bank for Agriculture and Rural Development (NABARD), General Insurance Corporation (GIC), Cooperative Banks and other commercial banks.
- The major issue is that all crops not protected by NAIS are susceptible to crop cutting trials. Another issue is the delay in delivering timely data owing to management connected with numerous departments and levels. There is a gap between the experience of crop cutting and the publication of official statistics.

3.6. Suggestions

- A local representative is needed to assist farmers evaluate complaints and obtain subsidies.
- Gram Panchayat is responsible for assessing insurance claims and paying payments to farmers. It may serve as the authorized entity to submit the proposal. Researchers have also claimed and evaluated losses.
- Farmers should pay as quickly as feasible, e.g. within 2-3 months after damage. Thus, however, may plan for the following crop season. Therefore, there is a necessity for good coordination between the banker and the regulator.
- There must be an interaction between all the organizations participating in this initiative.
- NAIS needs to attempt to develop another metric of production. If crop damage is extensive, need to search for a dependable method for monitoring and paying at the same time. Interviews with specialists and educated individuals may assist evaluate crop damage in various

ways. Other metrics may be utilized and various institutions might be engaged in the process.

- The unit that pays compensation should also be evaluated. According to NAIS, awards are computed as the difference between area returns and threshold returns multiplied by liabilities. This is an appropriate technique. The important issue is to define this region. Currently, profit estimations are calculated at the block level. NAIS will advance to the village level within 3 years after its establishment, however NAIS has not.

4. CONCLUSION

Since 1972, various crop insurances systems have been established in the United States, but do not affect farmers or share risks with them. Some farmers today commit suicide as a consequence of a lack of risk management; yet, would rather commit suicide than pay for crop insurance. As a consequence, greater care is needed in this area to share risks with farmers while also safeguarding crops from severe weather and natural catastrophes. Rabi 1999-2000 was the first to introduce NAIS in this setting. NAIS has high ambitions, but, have not been matched by farmers' expectations.

The Indian government has established a working group to address the NAIS's shortcomings. This group looked into and lowered the insurance unit area for the main crop Gram Panchayat, strengthened the basis for calculating the threshold yield, and boosted compensation by 80 percent and reduced the risk of tree death/plantation by 90 percent. Post-harvest losses are losses that occur after the harvest has been finished. Based on the recommendations of the collaborative group and input from interested subjects, the proposed modernized National Agricultural Insurance System (MNAIS) was developed and presented to the Planning Commission, including accident insurance and fixed rate insurance. The MNAIS will be implemented outside of the plan, according to the planning committee. All of these suggestions, however, remained on paper, and the government's crop insurance policy was not modified.

The AICIL has been in existence since 2003, and it is responsible for the implementation of the NAIS, which is certified in this area. Author also showed dynamism by experimenting with new ideas and methods. However, both organizationally and operationally, some changes are needed. There are two major needs. Is there a need for an active consultative body at the state level? One is efficient coordination among all stakeholders at the state level. The presence of an AIC at the district level is equally important. Those recruited at the district level should be carefully selected, well-trained, and capable of playing a major role in district coordination. Because the bonus gained is always less than the NAIS credits, the NAIS is tinted red. To cover pure risk, management costs, and reasonable rewards, a premium rate is required. Crop insurance may be provided by private insurers to cover a broader range of farmers and improve crop insurance yields. Farmers should be able to understand village insurance goods if however, are given in a straightforward way. This plan may be profitable locally owing to the farmers. As a consequence, knowledge and proper implementation of the crop insurance system may help India increase food production while reducing the risk of crop failure.

REFERENCES

- [1]. Dandekar VM. Crop Insurance in India. *Econ Polit Wkly*. 1976;11(26):A61–80.
- [2]. Raju SS, Chand R. Progress and problems in agricultural insurance. Vol. 42, *Economic and Political Weekly*. 2007. p. 1905–8.
- [3]. Raju, S. S. and Chand R. Agricultural insurance in India: Problems and prospects. *Natl Cent Agric Econ Policy*

Res. 2008;(8):2–87.

- [4]. Raju SS, Chand R. A Study on the Performance of National Agricultural Insurance Scheme and Suggestions to Make it More Effective. Vol. 21, *Agricultural Economics Research Review*. 2008.
- [5]. Ifft J. Centre for Civil Society Government vs Weather The True Story of Crop Insurance in India. *Research Internship Papers*. 2001.
- [6]. GoI. *Agricultural Statistics at a Glance 2016*. Minist Agric Farmers Welf. 2016;1–519.
- [7]. Tirivangasi HM. Regional disaster risk management strategies for food security: Probing Southern African Development Community channels for influencing national policy. *Jamba J Disaster Risk Stud*. 2018;
- [8]. Singh KM, Meena MS, Singh RKP. Livestock Value Chains: Prospects, Challenges and Policy Implications for Eastern India. *SSRN Electron J*. 2012;
- [9]. Blanchard JL, Watson RA, Fulton EA, Cottrell RS, Nash KL, Bryndum-Buchholz A, et al. Linked sustainability challenges and trade-offs among fisheries, aquaculture and agriculture. *Nat Ecol Evol*. 2017;
- [10]. Williams TO, Mul M, Cofie O, Kinyangi J, Zougmore R, Wamukoya G, et al. Climate Smart Agriculture in the African Context. *CgspaceCgiarOrg*. 2015;