

## NAIS-CROP INSURANCE SCHEME IN MAHARASHTRA

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**ABSTRACT:** In Maharashtra ,agricultural sector is dependent on vagaries of weather. Particularly rain-fed areas. Highly susceptible to risks like droughts and floods; It is necessary to protect the farmers from natural calamities and ensure their credit eligibility for the next seasons,for this purpose the government of Maharashtra introduced many agricultural schemes throughout the country. This research paper has made attempt to performance of National agricultural Insurance scheme (NAIS) launched in Maharashtra.

**KEY WORDS:** Crop Insurance, National agricultural insurance scheme(NAIS)

**INTRODUCTION:** Crop Insurance is the farm income but also helps the farmers to initiate production activity after a bad agricultural year. It cushions the shock of crop losses by providing farmers with a minimum amount of protection. First crop insurance scheme introduced was first individual approach scheme in 1972 . Initially this scheme was comprised to H-4 cotton crop in Gujarat. Only but later on it was extended to groundnut, wheat ,gram and potato in Andhra Pradesh,Gujrat,Maharashtra,karnatak,Tamilnadu and west Bengal. The scheme insured only 3110 farmers & paid premium of Rs. 4.54 lakhs only as against Rs. 37.88 lakhs,therefore it was continued till 1978-79 only. Another scheme introduced in 1979 was pilot crop Insurance scheme (PCIS) based on area approach. This scheme covered 6.23 lakhs farmers growing cereals,oilseeds,cotton, potato & chickpea & was implemented in 12 states still 1984-85. In line with this scheme, a new scheme was launched namely comprehensive crop insurance scheme in 1985. It was based o short term crop credit and homogeneous area approach. This scheme covered 763 lakh farmers for a premium of Rs. 404 crore against claims of Rs. 2303 crore. Both the schemes.PCIS & CCIS were subject to the farmers having seasonal agricultural loans from any financial institutions. But in case of PCIS scheme was on voluntary basis while CCIS was compulsory for all the loanee farmers. Different states were demanding for the timely modification in CCIS. Therefore, a new scheme was launched in 1997viz; experimental crop insurance scheme afterwards,numbers of schemes were launched to insure farmers from the crop losses due to different calamities.

The National agricultural insurance scheme (NAIS) was introduced in Rabi 1999-2000 by the agriculture Insurance company of India Ltd.(AIC). This scheme was the replacement of comprehensive crop insurance scheme CCIS . The main objective of the scheme was to protect the farmers against the crop losses suffered on account of natural calamities, such as drought, flood, hailstorm,cyclone ,pests and diseases. The scheme focused on to increase coverage of farmers. crops and risk commitment. It was available to all the farmers both loanee and non-loanee irrespective of their size of holding. It covers all the food crops (cereals, millets and pulses),oilseeds and annual commercial/horticultural crops,in respect of which past yield data is available for adequate number of years 3. The scheme was continued till kharif 2013; however,some states are allowed to implement NAIS during Rabi 2013-14 also.

Agriculture is continuous to be the main source of livelihood of thousands of households in Southern Maharashtra. A majority of agricultural producers are small farmers & major part of agriculture is rain fed agriculture. Thus, the Agriculture is heavily dependent on weather & uncertainty of weather cycle it makes agriculture risky , so Agricultural insurance is an instrument to protect the uncertainties of crop production, because the farmers suffers from low income & heavy debt. Agriculture insurance scheme is not properly implemented. It is understood that the government has not provided proper guidance to the farmers about agriculture insurance schemes.

Recurring drought is a major challenge in the Drought Prone Area of Maharashtra State in India. Agriculture (e.g., rainfed cropping and livestock) is the major income activity of over 64% of the state's population. The rural farming community's perception of drought impacts on their socio-economic activities and environment, their adaptation at the household level and opinions on

government drought mitigation measures. In Maharashtra the Marathwada region is facing severe water scarcity, drought affected region in Marathwada includes eight districts. Aurangabad, Nanded, Latur, Jalana, Beed, Parbhani, Osmanabad and Hingoli. Jalna is the most affected district among others in the region and Maharashtra government also has declared a “drought-like condition” in 14,708 of the state’s 43000 villages, this means the drought covers 34% of the state. So that in Maharashtra is needful state insurance scheme like NAIS to secure of crops and for income of farmers .

According to Times of India news on 31 may, 2016.. Farmers in Maharashtra have received as much as Rs. 4205 crores through the crop insurance scheme. The crop insurance scheme has been in operation in Maharashtra since 1999-2000. As many , as 82.5 lakh farmers are enrolled in the scheme of these, 71.5 lakh are beneficiaries..

**THE STATEMENT OF THE PROBLEM:** Agricultural production therefore is inherently a risky business and farmers face a variety of weather, pest, disease, input supply and market related risks. Given an uncertain income each year, farmers must worry about their ability to repay debt ,to meet overhead cost and in many cases their ability to meet essential living cost for their families. So crop insurance is benefitting to most of the farmers but they could not afford the new technology for the development of agriculture. Agriculture is heavily dependent on weather and uncertainty of weather cycle makes agriculture highly risky for a section of farmers. Crop Insurance is an instrument to protect the uncertainties of crop production with less premium. The present study is an attempt to find out the role of NAIS( National Agricultural Insurance scheme) in the development of Agricultural sector of Maharashtra.

**OBJECTIVES OF THE STUDY:**

- 1) To study the growth of crop insurance in Maharashtra.
- 2) To examine the extent of help NAIS received by farmers in Maharashtra.
- 3) To analysed the crops covered under insurance by NAIS in Maharashtra.

**SIGNIFICANCE OF THE STUDY:** Present study is significant for potential beneficiaries from those villages which have not much awareness of crop insurance scheme . It will helpful to small and marginal farmers to protect their interest in crop against natural calamities and getting benefits under this scheme. It will also assist the insurers, bankers policy. Prescription and policy intervention.

**METHODOLOGY:** Case study has been used this paper, purpose of this paper to analyzed that what crop insurance schemes are implemented through Maharashtra in Agricultural sector, this study is mainly dependent on secondary data. Some journals, magazines and etc.

**REVIEW OF THE LITERATURE:**

1. **Pramod Mishra**<sup>1</sup> (1995) wrote in his paper “Is Rainfall Insurance a New Idea-pioneering work Revisited” that agricultural insurance ,especially crop insurance, exists in many countries as an institutional response to agricultural risk.
2. **M Asokan,R P Singh and T S Walker**<sup>2</sup> (1986) examined in their paper “Risk Benefits, Crop Insurance, and Dry land Agriculture” that there is participation by farmers in voluntary, public-sector crop insurance programs has historically been low.
3. **M.M. Patil and S.G Borude**<sup>3</sup> (1993) examined the paper” Comprehensive Crop Insurance Scheme- in Raigad District” This study revealed that the actual operations of the comprehensive crop insurance in two tahshils of Raigad district.
4. **Ramesh Chand and S.S. Raju**<sup>4</sup> (2007) has discussed in his article “progress and Problems in Agricultural Insurance” the insurance schemes in place for agriculture and examines problems that prevent them from being implemented on a larger scale.
5. **Rashmy Nair**<sup>5</sup> (2010) wrote in his paper “Crop Insurance in India Changes and Challenges” that crop insurance programme in India through the multi-peril yield based National Agricultural Insurance scheme reveals that while it has done well on equity grounds, the coverage and indemnity payments are biased towards a few region and crops.

**GROWTH OF CROP INSURANCE SCHEME IN MAHARASHTRA:**

Crop insurance is one method by which farmers can stabilize farm income, investment and guard against disastrous effect of losses due to natural hazards or low market prices ; it helps the farmers to initiate production activity after a bad agricultural year, It cushions the shock of crop losses by providing farmers with a minimum amount of protection. It spreads the crop losses over

space and time and helps farmers make more investments in agriculture. Crop Insurance scheme insured only 3110 farmers and paid premium of Rs. 4.54 lakhs. Therefore, it was continued till 1978-79 only. Presently NAIS is being implemented by 25 states and 2 Union territories. Under NAIS below crops has been covered.. The crops in the following the past yield data based on crop cutting. Experiments is available for adequate number of years and requisite a number of CCEs are conducted for estimated the yield during the proposed season-

- 1) Food crops(cereals, millets and pulses)
- 2) Oilseeds &
- 3) Annual commercial / annual Horticultural crops-

Ginger, onion, turmeric and chilies were covered under insurance during the second year of the scheme. Other annual commercial/horticultural crops have also been brought under insurance cover in the subsequent years depending on the availability of crop yield data.

Agricultural production is an outcome of biological activity which is highly sensitive to changes in weather; such as temperature humidity rainfall wind etc. for instance, low soil moisture due to poor precipitations in the pre sowing period adversely affects seed germination resulting in reduced plant population. The poor precipitation during growth period result in stunted plant growth. Heavy during early growth period causes submission of plants. Similarly hailstorms, wind and cyclones damage the standing crops by lodging and uprooting especially the partials. High humidity may cause pests and diseases. All these the result in partial loss in the yield and sometimes complete crop failures and hence reduced income to farmers; so crop yields are not stable as such risk measure and it is treated as a cost, so to avoiding, preventing, sharing,transferring,spreading, taking risk, there is a need of crop insurance in agricultural sector; it is a technique where losses suffered by few are met from funds accumulated through small contributes made by many who are exposed to similar risk. Below tables will show us season wise and crop wise statically growth of area insured, sum insured, farmers quantity and benefited farmers quantity.

**Table I**  
**Season wise farmers insured and insurance charges under NAIS in Maharashtra(2000-2013)**

Season	Farmers Insured		
	Kharif('000)	Rabi('000)	Total
2000	2529	421	2950
2001	2667	86	2753
2002	1793	248	2041
2003	1727	1035	2762
2004	2070	141	2211
2005	2316	239	2555
2006	1638	38	1676
2007	1892	92	1984
2008	3453	52	3505
2009	3102	82	3184
2010	2125	56	2181
2011	2192	320	2512
2012	1331	992	2323
2013	1484	258	1742
C.G.R.	-1.73	-0.87	-1.21
S.D	607	327.28	536.06
MEAN	2165.65	290	2455.64
C.V	28.05	112.86	21.83

(Source: Article by Suresh A and other senior economist in “Performance of crop insurance in rainfed regions-the case of Maharashtra..submitted report dated on 25-12-2015)

Note: M- million, FI- Numbers of farmers Insured, AI- Area Insured, SI- sum Insured, FB- Numbers of farmers benefited.

Among all states Maharashtra is the state with higher numbers of farmers insured under the scheme NAIS. Table I shows that Total number of farmers insured under NAIS till the year 2012-13.there is negatively growth has been seen for kharif and rabi crops. As compare to kharif

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and Rabi crops figures for farmers secured through NAIS positive for kharif crops than Rabi crops, it was total (-1.21) growth was in 2013 through 2013. In variations some fluctuations was there but in figure variations was positive for Rabi Crops as compare to Kharif Crops.

**Table: II`****Seasonwise farmers benefited and insurance charges under NAIS in Maharashtra(2000-2013)**

Season	Farmers Benefied		
	Kharif('000)	Rabi('000)	Total
2000	1057	174	1231
2001	551	20	571
2002	229	121	350
2003	528	693	1221
2004	693	22	715
2005	245	26	271
2006	620	1	621
2007	260	0.15	260.15
2008	1773	10	1783
2009	1329	1	1330
2010	82.5	2	84.5
2011	163	283	446
2012	417	901	1318
2013	287	67	354
CGR	-5.9	-5.15	-3.38
S.D	488.4	282.6	522.6
MEAN	588.18	165.80	753.97
C.V	83.03	170.46	69.31

(Source: Article by Suresh A and other senior economist in "Performance of crop insurance in rainfed regions-the case of Maharashtra..submitted report dated on 25-12-2015)

Note- million, FI- Numbers of farmers Insured, AI- Area Insured, SI- sum Insured, FB- Numbers of farmers benefited.

Table II shows that CGR of farmers benefited under NAIS in Maharashtra for 2000-2013 period; growth is negative, fluctuations also there total CGR growth was (-3.38) about variation also shown by table II, there are positive growth for Rabi Crops it seen as 170.46 thousands farmers are benefited through NAIS in Maharashtra.

**Table III****crop wise farmers/area covered sum insured and insurance charges under NAIS in Maharashtra (2011-2013)**

SEASON	FI ('000)	AI('000Ha)	SI (Rs.M)
Kharif 2011			
Cotton	113	125	2097
Paddy	317	270	4637
Soyabean	500	413	4057
Kharif 2012			
Cotton	138	157	3300
Paddy	196	192	2660
Soyabean	314	275	3423
Kharif 2013			
Cotton	283	328	6774
Paddy	150	161	2343
Soyabean	398	403	5990
Rabi 2011			
Cotton	51	35	467
Paddy	158	186	1039
Soyabean	0.4	0.3	2
Rabi 2012			
Cotton	278	184	3285
Paddy	477	507	4164
Soyabean	3	2	10

Rabi 2013			
Cotton	87	60	1159
Paddy	96	95	729
Soyabean	0.3	0.1	1

**Note: M- million, FI- Numbers of farmers Insured, AI- Area Insured, SI- sum Insured, FB- Numbers of farmers benefited**

It is clear from the above table that major crops insured under NAIS in Maharashtra during kharif season are cotton, paddy and soyabean and during rabi season Bengal gram, jowar and wheat. In case of kharif crops, highest numbers of farmers are insured under soyabean followed by cotton and paddy for the year 2013. However, in case of Rabi Crops, highest numbers of farmers are insured under jowar followed by Bengal gram and wheat. So that as per this table information show us which kharif and rabi crops secured under this scheme in Maharashtra, but comparatively we can say that there is not increasing quantity of farmers who are taking benefits of NAIS crop insurance scheme, which is can stabilize them in their farm income and for their crop security.

Below given table shows us data of numbers of farmers who have taken benefits of NAIS in 2006-2011..this information is taken from economic survey of Maharashtra 2011-12, 2012-13, 2013-14, 2014.

**Table IV**  
**Farmers covered under NAIS (Rs.Crore) Years-2006-2015**

Year	Farmers covered			Compensation	
	No. of farmers	Insured amt	insurance premium	No. of farmers (lakh)	Amount
2006-07	16.76	850.35	38.45	6.21	140.59
2007-08	19.83	879.22	32.12	2.60	86.31
2008-09	35.02	1,665.45	74.81	17.23	473.91
2009-10	31.83	2,507.16	103.05	13.29	376.26
2010-11	22.04	1,324.64	51.75	0.85	14.84
2011-12	25.11	1,824.96	91.06	4.46	174.89
2012-13	23.22	2,410.49	92.91	13.17	767.27
2013-14	17.42	2,247.51	117.00	3.55	103.24
2014-15	55.95	5,484.03	198.06	41.71	1,806.57

Table IV says that from 2006 numbers of farmers quantity is increasing year wise but they got comparatively less benefits from NAIS. Farmers are also not taking benefits of this scheme we can see above table details in 2006-07 6.21 lakh farmers are covered with NAIS but in 2007-08 decreased number of farmers after in 2010-11 we can see once again farmers would not given response for NAIS crop insurance scheme. in this manner, as per above table given data NAIS scheme is spread out in Maharashtra, but till farmers are not showing interest to take benefits of NAIS crop insurance scheme.

Farmers in Maharashtra have received as much as Rs. 4205 crores through the crop insurance scheme in as single year. By comparison they had received 4737 crores insurance for crop damage in the proceeding 15 year. The crop insurance scheme has been in operation since 1999-2000. As many, as 82.5 lakh farmers are enrolled in the scheme of these 71.5 lakh are beneficiaries. The biggest beneficiaries of the scheme are in Beed district where farmers will receive Rs. 832.98 as crop insurance. Latur's farmers will receive Rs. 604.59 crores. Crops spread over 49.33 lakh hectares will benefit from the insurance. Now in 2016 Modi government or central government launched Fasal Beema Yojana for crop insurance its replaced name instead of NAIS scheme. As per times of India news 31 may 2016. It is administered under the ministry of agriculture and farmer's welfare. The main aim of the scheme is to provide insurance support to the farmers so as sustain in the period of damage to their crops under the insurance plan the premium rate for the khariff and Rabi crops will be 2% of the actual sum assured while for the commercial and horticultural crops the premium rate will be 5%.

#### **FINDINGS:**

- 1) In Maharashtra weather based crop implementing so it is the important enemy of farmers, it's conditions are not in hand of the farmers and they can't control them, so crop insurance is a risk management tool is very important to farmers.
- 2) In Maharashtra some regions are drought prone as per given above information, they are facing the problem of pests, diseases and other natural calamities when they require to manage the risk where crop insurance is a dynamic tool for them.
- 3) As per given table information of NAIS covered data of farmers and crop wise growth of quantity of farmers and benefited farmers, also table I also explained here season wise growth of NAIS for

crops insured, and Table II also explained sum insured and farmers who are taken benefits from the NAIS scheme.

- 4) According to government of Maharashtra (2011, 2012, 2013, 2015-16) Economic survey of Maharashtra Mumbai, India provided data of covered NAIS crop insurance farmers information period of 2010-2015. In this period we can see that farmers are not showing interest in this scheme as decided by government or they are not ready to take benefits of this scheme. So there is need to give detail knowledge about NAIS to farmers, and convince them for to take advantage for their crops damage and also they can increase their farm income through this scheme.
- 5) We can also says that as per NAIS scheme process banks are included to provide benefits to farmers, but as per getting data , we have to say bankers as well as agricultural officer also failed to convince the farmers for crop insurance scheme insured their crops.

#### **SUGGESTIONS:**

- 1) Farmers should to get the knowledge about the crop insuranceschemes,which will improve their farm income as well as they can get safety to their crops.
- 2) NAIS insured some khariff and rabi crops through this scheme, so farmers have to get knowledge about crops and have to take this crops which they can insured through NAIS scheme.
- 3) There is need of agent at local level for helping the farmers, so that our farmers are illiterate and they afraid to get data from bankers or agricultural officers, if agent will there to give information about the scheme, he can give information as they want and will help to spread this scheme advantage at village level and after that district level.
- 4) As per NAIS crop insurance process some improvements need to be carefully considered before incorporating in the programme.
- 5) Find out the failures of crop insurance and need to overcome that problems and search some solutions and implemented in agriculture sector.

#### **CONCLUSION:**

Many schemes of crop insurance have been launched in the Maharashtra but they failed to because of farmer's illiterateness and to influence the farmers and share the risk of farmers. Nowadays, some farmer's are committing suicide due to lack of finance, risk management debt of money and so they are selecting option of suicide rather than crop insurance. Serious concern of this problem of sharing the risk of farmers and get safety to their crops against uncertainty of weather cycle and natural calamities on this background NAIS has been introduced since rabi 1999-2000, there are so many expectation, but it also failed to meet farmers beneficiaries.

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