# Agriculture Insurance

Agriculture in India is easily one of the country's major occupations. Approximately 52% of Indians depend on the crops that they yield for their livelihood. Agriculture contributes 16% to the overall GDP of the country. Unfortunately, agriculture in India can be a risky business for farmers because of the chances of natural disasters (floods, droughts etc.). The fluctuating prices of agricultural products are a source of worry too. For the sake of farmers in the country, the government has launched crop insurance to lighten the heavy risk associated with agriculture.

Agricultural producers (including ranchers, farmers and others) purchase crop insurance in order to protect themselves against the loss of revenue due to declines in the prices of agricultural commodities or from the loss of their crops due to natural disasters (such as floods, hail, pests, diseases, drought etc.). Croprevenue insurance and crop-yield insurance are the two general categories of crop insurance.

# **CROP INSURANCE**

Crop or Agriculture Insurance covers risks of anticipated loss in yield of various crops. Almost the entire of Crop Insurance business comes from 'Schemes' or 'Programme'. These Schemes operate on principles of 'Area Approach'. Coverage is compulsory for farmers taking crop loans from rural financial institutions (RFIs) for cultivation of crops, i.e., loanee farmers. Nonloanee farmers can also insure their crops under the same schemes.

### What is Crop Insurance ?

Crop insurance is a means of protecting the agriculturist against financial losses due to uncertainties that may arise from crop failures/losses arising from named or all unforeseen perils beyond their control (AIC). Risk associated with agriculture can be broadly classified as (a) production/yield risk which may arise because of random uncontrolled inputs like weather (Drought, Flood, Cyclone, Inundation, Hailstorm, Frost, Cold waves etc.) or Cyclic and controllable events like pests and diseases. (b) Price / Market Risks which are highly variable and depends on numbers of

factors like Supply & Demand, Quality / Perishability, Price fluctuations, Trade barriers etc.

Crop insurance restores confidence among the farmers, stabilizes the farm income and helps the farmers to initiate production activity after a bad agricultural year. It mitigates the shock of crop losses by providing farmers with a minimum amount of protection and helps farmers make more investments in agriculture.

# Why is Crop Insurance required?

There have been shocking news of farmers taking grave measures due to the instability of crop yields in the news. The effects of such events like drought can be softened with crop insurance which will protect farmers from the harsh results.

Here is why Crop Insurance is a basic requirement that all farmers should adopt:

1.To help stabilize farm incomes, especially in the years that disaster hits.

- 2.To provide farmers with financial support and insurance coverage in the event of natural calamities, diseases and pests.
- 3.To encourage farmers to implement progressive farming practices with better technology.

#### **Crop insurance initiative in India**

The concept of crop insurance is not very new to India. Over the years it has evolved at irregular intervals but continuously and still growing in terms of scope, methodologies and practices. Though many attempts were made to introduce crop insurance before independence it was not concrete. It is only after independence that the crop insurance policy got a concrete shape when in 1965 the Government of India decided to draw a Crop Insurance Bill and model scheme for crop insurance in order to enable the state to initiate crop insurance. In 1970, the Draft Bill and the Model Scheme were referred to an Expert Committee headed by Dr. Dharm Narain.

#### First Ever Crop Insurance Scheme-1972

The first crop insurance programme was introduced by General Insurance Department of Life Insurance Corporation of India in 1972-78 on a limited basis on H-4 cotton in Gujrat. Subsequently, the scheme was taken over by newly formed General the Insurance Corporation(GIC) and also included Groundnut, Wheat and Potato and implemented in the states of Gujarat, Maharashtra, Tamil Nadu, Andhra Pradesh, Karnataka and West Bengal. The scheme continued up to 1978-79 and covered only 3110 farmers for a premium of 4.54 lakhs against claims of 37.88 lakhs. This scheme was based on individual approach.

#### Pilot Crop Insurance Scheme (PCIS) – 1979

Realizing the shortcomings of the first crop insurance programme Professor V. M. Dandekar, often referred to as the "Father of Crop Insurance in India", suggested an alternate "Homogeneous Area approach" for crop insurance in the mid-seventies. In 1979 the General Insurance Corporation introduced a Pilot Crop Insurance Scheme on Area Approach making state government participation voluntary. The scheme covered cereals, millets, oilseed, cotton, potato, gram and barley. The scheme ran till 1984-85 covering 6.27 lakhs farmers for a premium of Rs. 1.97 crores. 13 states participated in the scheme.

### Comprehensive Crop Insurance Scheme (CCIS)-1985

This scheme was introduced from 1st April 1985 by the Government of India with the active participation from state governments. This scheme introduced was on Homogeneous Area Approach and linked with short-term crop credit, i.e. all crop loans given for notified crops in notified areas were compulsorily covered under the scheme. 15 States and 2 UTs had participated in the CCIS during its tenure from Kharif 1985 to Kharif 1999. These were Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Himachal Pradesh,

Karnataka, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Orissa, Tamil Nadu, Tripura, West Bengal, Andaman & Nicobar Islands and Pondicherry. The States of Rajasthan, Uttar Pradesh, Jammu & Kashmir, Manipur and Delhi had initially joined the Scheme but opted out after few years. In this entire period, the Scheme covered Rs. 7.63 crores farmers under an area of Rs.12.76 crores hectares, for a Sum Insured of Rs. 24,949 crores at a premium of Rs. 403.56 crores. CCIS was discontinued from Kharif 1999 and replaced by "National Agriculture Insurance Scheme" (NAIS), which is being continued till date.

#### Experimental Crop Insurance Scheme (ECIS) – 1997

During 1997-98 ECIS was introduced in 14 districts of 5 states. The Scheme was similar to CCIS, except that it was meant only for all small / marginal farmers with 100% subsidy on Premium. During its one season, the ECIS covered 4,54,555 farmers for a Sum Insured of Rs. 168.11 crore at a Premium of Rs. 2.84

crore against which the Claims paid were Rs. 37.80 crore.

Features and Benefits of Crop Insurance:

The important features and benefits of crop insurance include:

- •The fact that the insurance will provide financial support in the unfortunate event of crop failure. It will thus be a critical instrument in the development of crop production.
- •Encourage farmers to adopt progressive farming practices and higher technology in Agriculture.
- •Crop insurance helps farmers maintain flow of agricultural credit.
- •On a larger scale, it is not just the insured farmer who will be benefitted from the crop insurance. The entire community will be directly and indirectly benefitted in the form of maintaining production & employment, taxes, generation or market fees etc.

Further, the net accretion to economic growth will be affected.

 Another important benefit is that crop insurance streamlines loss assessment procedures and also helps to build up accurate statistical base for crop production.

# What's covered, What's not under Crop Insurance:

Over the years, the list of things that are covered in crop insurance has evolved to benefit farmers. Depending on what policies that the farmer opts for, both the personal and property need of the farmer may be covered. Following is a list of what's covered and what's not under such policies:

- Loss or damage to the property of the insured farmer
- Damage or loss caused due to fire or natural disaster (including storm, flood, tornado, earthquake, cyclone etc.)
- Coverage for personal accident. This includes the insured farmer and the farmer's family members).

- •Cover for loss of pump set
- Cover for damage/ loss of tractor
- Coverage for damage/ loss caused by power failure

#### Crop Insurance Claim process:

Framers must register themselves with the insurance provider company to begin with. It is necessary to register the marketing surplus at the sowing of crop in order to get crop insurance. The insurance company will then offer the appropriate coverage scheme. The coverage scheme includes market price from past or minimum support price guarantee.

The premium for any type of price insurance must be paid by the farmers. The government will help in the premium payment in the initial stage.

In case of market price falling: During the harvest period, in case the notified market price drops below guaranteed price, then the farmer will be compensated by the insurance company.

In case of damage: First, the yield data need to be received from the State/UT Govt. according

to the prescribed cut-off dates. Then the claims will be run down and settled by IA. The individual Nodal Banks will then receive the claim cheques and claim particulars. This will be followed by the bank at the grass root level crediting the accounts of the individual farmers. The particulars of beneficiaries will be put up on the bank's notice board.

The IA will devise a way to estimate the losses at Individual farmer level. DAC/State/UT will be consulted for this process and will be in context with the particular disaster such as flood, cyclone, landslide etc.

The main Schemes available to farmers in respect of crop insurance are as under:

a) National Agricultural Insurance Scheme (NAIS) of Government of India

b) National Crop Insurance Programme (NCIP) of Government of India

Modified National Agricultural Insurance
Scheme (MNAIS),

ii. Weather Based Crop Insurance Scheme (WBCIS) and

iii. Coconut Palm Insurance Scheme (CPIS)

(a) National Agricultural Insurance Scheme

Agricultural Insurance National Scheme (NAIS) is the Government sponsored crop insurance scheme under implementation in the country since Rabi 1999-2000 season as part of risk management in agriculture with the objective of providing financial support to the farmers in the event of failure of crops as a result of natural calamities, pests and diseases. Agriculture Insurance Company of India (AIC) Ltd. is the Implementing Agency of the Scheme. The scheme is available to all the farmers – loanee and non-loanee both irrespective of their size of holding. It envisages coverage of 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.

The premium rates are 3.5% per cent (of sum insured) for bajra and oilseeds, 2.5% for other Kharif crops; 1.5% for wheat and 2% for other the Rabi crops. In of case commercial/horticultural crops, actuarial rates are being charged. At present small and marginal farmers are entitle to subsidy of 10% of the premium charged from them which is shared equally by Centre and State Governments. The scheme is operating on the basis of 'Area Approach' i.e. defined areas for each notified crops - block, tehsil, mandal, firka, circle, gram panchayat etc.

Presently the scheme is implemented by 24 States and 2 Union Territories. During the last twenty five crop seasons (i.e. from Rabi 1999-2000 to Rabi 2011- 12), 1930 lakh farmers have been covered over an area of about 2919 lakh hectares insuring a sum amounting to about Rs 256065 crore under the scheme. Claims to the tune of about Rs. 25001 crore have been paid/payable against the premium of about Rs. 7565 crore benefiting about 518 lakh farmers (upto Rabi 2011-12 season).

NAIS was introduced in the year 1999 and is presently in operation in a few states. The Scheme is practically an all-risk insurance cover based on 'Area Yield Index'.

Which are the crops covered: The Scheme covers all food, oilseeds and annual commercial / horticultural crops for which historical yield data is available and crop cutting experiments are planned for the current year. State governments issue notifications containing names of crops, areas eligible for insurance, rates of premium etc. at the beginning of each cropping season.

Who can insure: The Scheme is available to all Farmers - compulsory for borrowing farmers and optional for non-borrowing farmers. Farmers have to fill-up a simple Proposal Form and submit the same with premium amount at the nearest branch of bank or Primary Agricultural Credit Society.

#### What is Sum Insured and Premium:

Sum Insured is at least equal to loan amount which can be increased to 150% of the value of average yield at the option of the farmer. There are limits for non- loanee farmers which are published in state government's notification. Premium rates for Food crops and Oilseeds ranges from 1.5% to 3.5% and actuarial rates are charged for Annual Commercial / Horticultural Crops. Subsidy in premium is available to small and marginal farmers at 10% of premium. Some State governments offer higher subsidy.

Where to pay premium (Intermediary): Network of financial institutions viz. commercial banks, regional rural banks and cooperative banks, spread across length and breadth of country, play the role of intermediaries. The scheme operates broadly on bancassurance model.

Levels of Indemnity: Levels of indemnity are

60%, 80% and 90% which means farmers are themselves to bear the loss of first 40%, 20% or

10% respectively. This condition is also broadly called 'deductible'.

What is the procedure for claims: The Scheme operates on principles of Area-Yield Index or Guarantee. There is a guaranteed yield termed as Threshold Yield for every crop in every Homogenous Area e.g. taluka, block or gram panchayat etc. Threshold Yield is moving average of past five years actual yield (three years in case of Paddy and Wheat) multiplied by applicable level of indemnity. If current season's actual yield recorded is lower than the Threshold yield, then claims become payable. Yield data used for claims is generated under General Crop Estimation Surveys (GCES) by way of crop cutting experiments. Procedure of assessment and settlement of claims are automated processes and the claim amount is credited to insured farmers' bank account. No paper work is required to be done by insured farmers or intermediaries.



NCIP has three components- viz. MNAIS, WBCIS and CPIS. There are some common features for MNAIS and WBCIS components i.e.

1. Private sector insurance companies are allowed as 'implementing agencies'.

2. Rates of premium are charged on actuarial basis. Actuarial rates of premium help insurance companies to transfer the risk in global reinsurance market and the governments to budget their liabilities.

3. Premium payable by farmers is subsidized substantially to make it affordable.

4. Sum insured is broadly equal to cost of cultivation.

5. All claims will be paid by insurance company as there will be no sharing of claims by state and central governments.

Component – I: Modified National Agricultural Insurance Scheme (MNAIS) MNAIS is an improved version of NAIS.

To improve further and make the scheme easier & more farmer friendly, a Joint Group was constituted by GOI to study the existing crop schemes. the insurance Based on recommendations of the Joint Group and view/comments of various stakeholders, a proposal on Modified National Agricultural Insurance Scheme (MNAIS) was prepared which has been approved for implementation on pilot basis in 50 districts during the remaining period of 11th Plan from Rabi 2010-11. The salient improvements made in MNAIS are as under:

• Actuarial premium with subsidy in premium ranging upto 75% to all farmers;

• Only upfront premium subsidy is shared by the Central and State Government on 50:50 basis and all claims liability is on the insurance Company.

• Unit area of insurance reduced to village/ village panchayat level for major crops.  Indemnity for prevented sowing/planting risk and for post harvest losses due to cyclone (coastal areas);

• On account payment up to 25% of likely claims as immediate relief to farmers;

• Uniform seasonality discipline for loanee and non-loanee farmers;

• More proficient basis for calculation of threshold yield; and minimum indemnity level increased to 70% instead of earlier 60%;

• The scheme is compulsory for loanee farmers and voluntary for non-loanee farmers;

• Participation of private sector insurers for creation of competitive environment for crop insurance.

• Setting up a catastrophic fund at the national level contributed by the central and the state government on 50:50 basis to provide protection to the insurance companies in the event of premium to claim ratio exceeds 1:5 at national level and failure to procure appropriate reinsurance cover at competitive rates;

• NAIS is withdrawn from those area(s)/crop(s) where MNAIS is implemented.

The Scheme has been implemented in all the 50 districts during Rabi 2011- 12 season and in 44 districts during Kharif 2012 and is being implemented in 35 districts during Rabi 2012-13. Since inception of the Pilot, 33.26 lakh farmers have been covered over an area of 36.27 lakh hectares insuring a sum amounting to Rs.8063.73 crore. The claims amounting to about Rs. 234.27 crores have become payable against the premium of about 824.38 crore benefiting about 2.29 lakh farmers (upto Kharif 2012 season).

Which are the crops covered: The Scheme covers all food, oilseeds and annual commercial /

horticultural crops for which historical yield data is available and crop cutting experiments are planned for current year. State governments issue notifications containing names of crops and areas eligible for insurance, rates of premium etc. at the beginning of each cropping season.

Who can insure: Available to all Farmers -

compulsory for borrowing and optional for non-borrowing farmers- who have to fill-up a simple Proposal Form and submit the same with premium amount in a nearest branch of bank or Primary Agricultural Credit Society.

#### What is Sum Insured and Premium: Sum

Insured is based on cost of cultivation and at least equal to loans disbursed. Often the State government decides the sum insured for various crops for a district within the State. Sum insured can extend up to value of Threshold Yield. Premium rates vary from crop to crop and area to area based on risk profile reflected in historical yield data, past insurance and claims experience.

Where to pay premium (Intermediary): Network of financial institutions viz., commercial banks, regional rural banks and cooperative banks, spread across length and breadth of country plays the role of intermediaries. Additionally, insurance intermediaries licensed by IRDAI are also allowed

6to insure non-loanee farmers.

Levels of Indemnity: Levels of indemnity are 80% and 90% which means farmers have to bear first 20% or 10% of losses respectively.

What is the procedure for claims: Operates on principles of Area-Yield Index or Guarantee. The guaranteed yield termed as Threshold Yield for every crop in every Homogenous Area e.g. taluka, block or gram panchayat, is based on past seven years' moving average yield with a provision for excluding yields of maximum two calamity years. The other process is same as the NAIS.

New provisions on claims: MNAIS provides for additional features in terms of coverage of 'Prevented sowing', post harvest losses, individual farm level assessment in case of localized calamities, and On-Account settlement of claims in case of serious crop losses/major disasters.

### Component – II: Weather Based Crop Insurance Scheme (WBCIS):

With the objective to bring more farmers under the fold of Crop Insurance, a Pilot Weather Based Crop Insurance Scheme (WBCIS) was launched in 20 States (as announced in the Union Budget 2007). WBCIS aims 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. It has the advantage to settle the claims within shortest possible time. The WBCIS is based on actuarial rates of premium but to make the scheme attractive, premium actually charged from farmers are restricted at par with NAIS. In addition to Agriculture Insurance Company of India Ltd. (AIC) private General Insurance Companies i.e. ICICI-Lombard, IFFCO-TOKIO, HDFC- ERGO and Cholamandalam MS Ltd. have also been allowed for implementation of

the scheme. From Current Kharif 2013 season five more private insurance companies have also been allowed.

Since inception of the Pilot in Kharif 2007, 323.74 lakh farmers have been covered over an area of 450.31 lakh hectares insuring a sum amounting to Rs. 55813.40 crore. The claims amounting to about Rs. 2764.35 crores have become payable against the premium of about 5113.25 crore benefiting about 181.26 lakh farmers (upto Kharif 2012 season).

Which are the crops covered:

The Scheme covers all food, oilseeds and annual commercial / horticultural crops. All crops for which historical yield data is not available can also be covered.

Who can insure: Available to all Farmers -

compulsory for borrowing farmers and optional for non-borrowing farmers -who have to fill-up a simple Proposal Form and submit the same with premium amount in a nearest branch of bank or Primary Agricultural Credit Society.

**Risks covered:** Major perils covered are deficit, excess and deviation of rainfall, relative humidity, temperature (high and low), wind speed and combination of above. Risks of hail-storm and cloud burst can also be covered as add-on covers.

What is Sum Insured and Premium: Sum

Insured is pre-defined and is based on cost of cultivation, and is decided by the state for each crop and district. Premium rates can be a maximum of 10% for Kharif and 8% for Rabi season with 12% for commercial /

horticultural crops. The premium subsidy available ranges from 25% to 50%.

Where to pay premium (Intermediary): Network of financial institutions viz., commercial banks, regional rural banks and cooperative banks, spread across length and breadth of country plays the role of intermediaries. Insurance intermediaries licensed by IRDAI are also allowed to insure non-loanee farmers.

What is the procedure for claims: If observed weather index value falls below or above (as the case may be) the notified trigger value, then claims shall be calculated per unit area. Claims are assessed and settled solely based on weather data of automated stations installed in Reference Unit Area for the purpose. Calculation is done based on term sheets published in notifications. Procedure of assessment and settlement of claims are automated processes. No paper work is required to be done by insured farmers or intermediaries. Losses for Add-on covers are assessed on individual basis for which farmers have to intimate the insurance company within 48 hours of the occurrence of the insured peril.

### Component - III: Coconut Palm Insurance Scheme (CPIS)

The Coconut Palm Insurance Scheme (CPIS) has also been approved for implementation on pilot basis from year 2009-10 in the selected areas of Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa and Tamil Nadu. The Sum Insured (SI) is based on the average input cost of the plantation and the age of the specific plant which varies from Rs. 600 per palm (in the age group of 4-15 years) to Rs. 1150 per palm (in the age group of 16-60 years). The premium rate per palm ranges from Rs. 4.25 (in the age group of 4 to 15 years) to Rs. 5.75 (in the age group of 16 to 60 years). Fifty per cent of premium is contributed by GOI; 25% by the concerned State Govt. and the remaining 25% by the farmer. The Insurance Company i.e. Agriculture Insurance Company (AIC) of India Ltd. is the implementing agency of the scheme and responsible for making payment of all claims within a specified

period. The CPIS is being administered by the Coconut Development Board (CDB).

Since inception of the Pilot in 2009-10, 27.66 lakh farmers have been covered over an area of 0.25 lakh hectares insuring a sum amounting to Rs.269.53 crore. The claims amounting to about Rs. 1.53 crores have become payable against the premium of about 1.46 crore benefiting about 3385 growers.

This scheme operates largely like a non-life insurance policy. It is an annual contract, administered only by Agriculture Insurance Company of India.

Who can insure: Any palm grower having at least five healthy nut bearing palms in a contiguous area is eligible to insure. Palms are insured in two categories viz., palms in age group of 4 to 60 years in case of dwarf and hybrid palms and 7 to 60 years in case of tall variety. What is covered: Storm, Hailstorm, cyclone,

typhoon, tornado, heavy rains, flood, inundation, pests, diseases, accidental fire, forest fire, bush fire, lightening, tsunami, severe drought and consequential total loss causing death of palm or making it totally un-productive.

What is not covered: Loss due to theft, war, nuclear risks, rebellion, revolution, insurrection, mutiny, natural mortality, uprooting etc.

Sum Insured and premium: Sum Insured for palms within the age group of 4th to 15th year is Rs. 900/- and premium is Rs. 9.00 per tree while for palms within the age group of 16th to 60th year is Rs. 1750/- and premium is Rs. 14.00 per tree. Subsidy of 75% is available. Farmer pays only 25% of premium amount.

Assessment of claims: Claims have to intimated to the insurance company within 15 days from occurrence of peril. Claims will be

assessed on individual basis and claims amount will be released to insured farmer.

### Crop Insurance-Challenges and Way Forward

There are about 119 millions farmer in our country who work hard to live their life and feed the country and yet they suffer most. Indian farmers live in the mercy of nature, there is no proper and adequate provision of security for crops grown by Indian farmers. Government measures are seem to be inadequate to protect and encourage farmers. It was only in 2003 that the Government of India established a special company i.e. Agriculture insurance Insurance Company of India Ltd.(AIC) for crop insurance. Following are the most common challenges of crop insurance in India:

• Lack of Comprehensive Model: Though the government has piloted and introduces many crop insurance schemes there is no such scheme which can protect or indemnify the loss of farmers growing crops in different parts and different climate in the country. Again where the loanee farmers get automatic insurance coverage for the crops for which he has taken the loan non-loanee farmers are not getting automatic coverage for their crops.

Out Dated Models: The technique used in various crop insurance schemes for estimation of crop yield, loss assessment and claim payout is outdated and not allinclusive, due to which the farmers who actually suffers are not indemnified properly and on the other hand the farmers who are not suffering get indemnified at par with the suffering farmers, which is very discouraging. Though the newly launched WBCIS seems to be little comprehensive but it needs a proper infrastructure i.e. whether stations in all "Reference Unit Area" which involve moderate cost and requires maintenance and expertise.

• **Delay in Claim Payout:** Claim payout procedure of crop insurance is very

lengthy. Farmers need to wait 11 to 12 months to get their claim. Due to which the farmer cannot initiate new cropping activity or it is delayed.

• Lack of Awareness: Since most of the Indian farmers are illiterate and villages in India are very remote, the farmers are not aware about crop insurance, crop loan and other government schemes and those who know they hesitate to enter in to official red tapes.

• Negligence of Government: Agriculture is the area in which the governments (both state & central) in India should have given the most importance but unfortunately governments neglect this area most. There is no campaign, awareness programmes so as to make crop loan and crop insurance popular among the India.

• Low motivation: All above discussed reasons club with some other reasons like education, confidence etc. lead to low penetration of crop insurance.

• Low Participation of Private Sector: Entry of private sector in crop insurance is restricted. Only in MNAIS and WBCIS they are allowed, in other crop insurance schemes they are not allowed.

# The Way Forward

There is a great relevance and importance of crop insurance in India where every year 16% of per 1,00,000 farmers commit suicide mainly due to crop failure. Farmers in India live miserably. Besides weather risk, Indian farmers are also struggling with risk of price and pest. Better management of all these risk can make Indian agriculture more productive and farmers can live a better life. The only way to achieve this is making crop insurance available and accessible with crop credit. Following are the some measures for it:

• Increasing the government participation in the process of making crop

insurance more popular and accessible among Indian farmers.

• Tailoring more comprehensive crop insurance scheme/schemes so that Indian farmers are indemnified properly and all farmers irrespective of loanee and non-loanee can get insurance coverage.

• Use of upgraded techniques and instruments for estimation of crop yield, loss assessment and claim payout.

• Inviting more private sector participants in the field of crop insurance.

• Increasing the spread of Agriculture Insurance Company Ltd to make crop insurance more popular and accessible.

Agriculture has enormous impact on Indian society and economy. The world has changed immensely but somewhere we fail to give that change to Indian agriculture. There is need for introducing new risk managing tools to protect Indian farmers. Proper implementation of comprehensive crop insurance schemes will contribute to a great extent in reducing the farmer's suicide rate in India, which is a serious case of concern. Crop insurance in India need full support from the Governments, IRDA and other insurance agencies. There is a great need for establishing an independent Crop Insurance Authority in the country as the existing mechanism fails to cater to the needs of Indian farmer.