

**National Conference**  
on  
**Crop Insurance - Issues and Challenges**

**27<sup>th</sup> September 2016**  
**Bangalore**



A Collaborative initiative of NABARD, INAFI India and IDF Foundation

# National Conference on Crop Insurance

- Issues and Challenges

27<sup>th</sup> September 2016  
Bangalore

PROCEEDINGS  
AND  
POLICY RECOMMENDATIONS

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## INTRODUCTION

Farming of crops is faced with multiple risks and vulnerabilities and the risks associated with vagaries of weather / monsoon - drought and floods have decisive influence on crop yield and returns to farmers. In fact, the monsoon makes or mars Indian Agriculture and thereby impact Indian economy a great deal. Though, the share of the agriculture in the country's GDP is only 14% in value terms the critical importance of agriculture of Indian economy lies in the fact that more than 60% of the population is heavily dependent on agriculture for livelihoods. Crop Insurance as a means of risk financing to cope up with economic loss arising out of crop failures has an important role to play to make the farming a viable proposition. In the country of 130 million farmers, only 28% of the farmers subscribe to crop insurance.

Insurance penetration among Indian farming communities is abysmal, out of gross cropped area of 195.26 million hectare only 42.32 million hectare - 22% was covered under crop insurance in 2014. Equal importance is the inadequacy of cover in terms of sum insured. According to the commission for Agricultural Costs and Prices, the average sum insurance per hectare under the existing national agriculture insurance scheme was just Rs. 18500 which is way below the gross value of output for most crops. for instance, the Gross Value Output (GVO of paddy has been Rs.47200 per hectare on the basis of all India average yield of 36 quintal and a minimum support price of Rs.1310 per quintal in 2013-14. This explains the apathy of farmers in taking insurance protection. There have been 3 variants of crop insurance schemes since 1999 - the National Agricultural Insurance Schemes (NAIS) implemented in 14 states by Agricultural insurance company of India with premium rates ranging from 1.5% - 3.5% of the total sum assured for food crops like cereal, pulses and oils. Since Rabi of 2010-11, Modified National agricultural insurance scheme (MNAIS) has been implemented on pilot basis in 15 districts. Subsequently, weather

based crop insurance scheme has been launched in 2007 - under implementation in 20 states 46.90% farmers were covered during the 5 years period ending 2012-13. Apart from Agricultural Insurance Company of India, a few private general insurance companies have also been implementing weather based crop insurance scheme.

With a view to provide better financial protection to the farmers, Govt of India launched the PMFBY w.e.f 2016 - from the Kharif season starting from June 2016. The scheme covers Kharif and Rabi crops as well as annual commercial and horticultural crops. For Kharif crop, premium has been fixed @ 2% of the sum insured and for Rabi crops it is fixed @ 1.5% of sum insured. For annual commercial and horticultural crops the premium would be 5%. In the earlier schemes only those farmers who have taken loan for the cultivation were eligible for insurance of the crops whereas under Prime Minister's Fasal Bima Yojana (PMFBY) all farmers are eligible.

It is noteworthy that there has been good number of experiments by small farmers with the support of the development NGOs in organising mutual insurance cover specific to the crops either based on weather index or simple cover indemnifying certain amount of crop cultivation expenses or crop output. The results have been mixed and the positive feature is that farmers have been able to appreciate the importance of risk financing, how the crop insurance works and also its limitations. The reliability of the rainfall data under the weather index crop insurance scheme remains suspect and challenge, not to speak of the issues of moral hazards. PMFBY has many improvements from the farmers' perspective as compared to earlier versions. Yet, there are many challenges in implementation including educating the farmers and bringing the non- loanee farmers under its fold, by far, the most challenging would be to bring the small farms of 1 - 2 Hectares under the crop insurance cover. NABARD as the development Bank for Agriculture has taken several initiatives to popularize and propagate crop insurance schemes among the farming communities at large.

Against this backdrop, NABARD and INAFI India, a network of development NGOs, in association with its member IDF Foundation based @ Bangalore had organised a National conference on Crop Insurance which brought together development stakeholders including Agricultural Insurance Company of India, General Insurance Companies involved in PMFBY, development NGOs working with small farmers, Agricultural Department of State Government, Farmers Producer Organisation / Companies, IRDA to deliberate on the issues and challenges of disseminating crop insurance schemes and chalk out the strategies to address them.

### Objectives of the Conference

1. To provide platform to the farmers and their leaders to express and to share their experience and views and also the constraints and challenges in accessing crop insurance.
2. To inform and elucidate different stakeholders on the on the salient feature and operational processes and methodologies of PMFBY.
3. To deliberate and converge on the ways and the means of spreading crop insurance cover under the aegis of PMFBY for non loanee farmers and enlarging the coverage.
4. To identify user friendly IT applications, including mobile applications for the last mile connectivity for the loanee and non loanee farmers including the institutional framework of Farmers Producers Organisations / Companies.
5. To share the successful experience of mutual crop insurance covers already experimented and promote the complementarity of such approaches to the formal crop insurance schemes.
6. To look at the systems and processes of the crop insurance schemes under the PMFBY and suggest hassle free methods to access and to reap the benefits under PMFBY.



## ACKNOWLEDGEMENTS

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Thanks to the participation and the contribution of a host of development stakeholders including Governments, RBI, NABARD, insurance companies, Commercial Banks, NGOs / Civil society groups, supply streams organisation supporting small farmers the deliberations of the conference has been enriched and their contributions are valuable. More importantly, a debt of gratitude is due to NABARD, Karnataka, Regional Office, Bangalore for the collaborative conference with the INAFI India network and its member, Initiative for Development Foundation (IDF Foundation). What is more, the generous support of sponsorship by NABARD, Canara Bank and Syndicate Bank is greatly appreciated and acknowledged.



## POLICY RECOMMENDATIONS

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1. The conference strongly commends that the PMFBY should be universal and inclusive and should reach out to non loanee farmers, tenancy farmers, share croppers, as this is a highly beneficial scheme providing good financial compensation at an affordable price. A multi stakeholder reach out approach involving Government departments (like Agriculture, Cooperation and land revenue departments), NGOs, Farmers Clubs, Farmers Producer Organisations (FPOs) / Companies (FPCs) and Lead Bank, NABARD DDMs particularly focusing small and marginal farmers who lack awareness, to enrol non loanee farmers including tenancy and share croppers. What is more, the process of enrolment should be simplified and hassle free which also includes the land record as proof of ownership or possession. In other words, the conference declared that a “Jan Dhan approach” is called for.
  - 1.1 Farmers Producers Organisation (FPO) and enabling NGOs with their capability to outreach thousands of farmers in a contiguous area can play a bigger role and hence their services be effectively enlisted for popularising PMFBY among the farming community.
2. As for the coverage of the risks the conference noted with concern that PMFBY is not comprehensive and does not provide for covering market risks due to price volatility, losses inflicted by wild animals on farms located close to forest eco system sanctuaries etc., and there is a need to improve the scheme from this perspective.
3. The conference declared that Digitising land records and integrating it with PMFBY will make the process of insurance enrolment as well as claim settlement hassle free. But digitization of land records being

at nascent stage in many States, the process has to be expedited through enactment of appropriate land reforms in all States and UTs.

4. In order to facilitate the universal and inclusive coverage of all farmers the conference recognises the urgency and imperative of awareness, sensitisation and literacy campaigns for PMFBY including building clarity and sensitization of implementing stakeholders – State Governments, banks, insurance companies. Quite a lot of publicity campaigns for the benefit of farmers before the start of the seasons are absolutely needed. And this needs adequate fund allocation which has not received adequate attention.
5. Insurance Companies being the implementing agency of PMFBY may allocate sufficient fund out of their CSR towards literacy campaigns in as much as budgetary allocation of Govt towards publicity is found grossly inadequate. It must be appreciated that the problem of low penetration and retention can be largely addressed only through literacy programmes.
6. Agriculture being season bound, seasonality discipline stipulated for various activities under the scheme is of paramount importance. For example, notification for implementation of the scheme has to be issued by the concerned State Govt/UT at least one month before the risk inception date. It is a matter of concern that in many instances, the timeline has not been adhered to and this should be strictly avoided.
7. Selection of Insurance Company just for one or two seasons should be avoided and it should be made for up to 3 years so that supportive and collaborative interaction and business relationship and service effectiveness can be established with all stakeholders.
8. The success of PMFBY largely depends on how the scheme is going to be implemented by the Insurance companies. Not to mention the monitoring and supervision role to be played by the DAC & FW,

Ministry of Agriculture, GOI - this is very crucial for the success of the scheme. There is a need to do PMJDY, - the drive and energy for PMFBY to reach out millions of farmers.

9. Notwithstanding many initiatives taken over the past two decades, crop insurance continues to remain as supply driven and the real challenge is to make it demand driven. And this calls for intensive literacy campaigns for the farming community which, inter alia, should include screening of short film on the subject that will capture their attention and also bring quick awareness. The benefits of loss compensation provided to the insured should also be showcased in Mass campaigns, Maha Sabhas so that the community would get sensitised on the importance of insurance.
10. SHG members availing bank loan through the group and utilising for crop production will be out of ambit of PMFBY unless they take permitted route of accessing risk cover as per scheme guidelines. To provide risk cover to such excluded community in a simplified way, NGOs can explore crop insurance on mutuality basis and in such cases Govt. can also explore subsidising premium on a pilot basis.
11. Risk mitigation practices such as mixed farming and adoption of various agronomic practices such as tank silt application, micro irrigation etc would act as insurance (non monetised methods) and protect the crop yield and such practices are to be documented and scaled up.
12. Sum insured is equal to scale of finance as decided by DLCC multiplied by area of the notified crop. But wide variations are observed in the scale of finance for the same crop even among the neighbouring districts. To avoid disparity among the farmers raising the same crop in a homogenous area, say a cluster, a uniform scale of finance which could probably be a harmonised figure for all the districts in the cluster can be adopted for the purpose of insurance.

13. In respect of Weather Based Crop Insurance Scheme (WBCIS) which seeks to compensate crop loss based on triggers arising out of adverse weather factors, it is generally felt that rain data captured in the Insured Unit is unrealistic due to lesser number of rain gauges employed which do not truly represent the weather condition of a larger area. And such technological inadequacies / deficiencies affecting crop loss estimates have to be carefully avoided to make the scheme more reliable and acceptable among the farmers.
14. Farmers are clueless as to whom should they approach in case of crop loss. In case of wide spread calamity where the settlement would happen on area basis, the farmers can probably wait for the due process to be completed to get the compensation. But in the event of post-harvest losses or localised perils affecting individual / group of farmers, the insured farmers who are anxious should know clearly about who is mandated to receive the Crop Loss Report and take it forward for settlement.
15. Assessment of loss is based on the yield estimate arrived through Crop Cutting Experiments for which sampling size for the Unit Area and other operational procedures to make it error free have been given in the PMFBY guidelines. But the past experience of farmers with regard to CCE is that it has not truly represented the yield losses of all farmers in settlement process. The farmers being the ultimate customers of the Crop Insurance Scheme, their grievances have to be carefully weighed and also redressed to their satisfaction.
16. For Insurance Companies, crop insurance as a business proposition, should be economically viable and sustainable so as to ensure long term continuity of the scheme. Govt. of India needs to look into this aspect on a regular basis and where necessary cross subsidisation can also be worked out.



## PROCEEDINGS

### **INAUGURAL SESSION: Welcome Address**

#### **Shri L.R.Ramachandran, General Manager NABARD' Karnataka Regional Office**

Extending a warm welcome to the participants, Shri L.R.Ramachandran General Manager NABARD, Karnataka Regional Office, said that this National Conference is timely initiative as the Prime Minister's Fasal Bhima Yojana (PMFBY), an



initiative of Government of India is getting under way across the country. This is a massive crop insurance scheme which would benefit millions of farmers. He was of the view that being the first year of implementation many operational issues would crop up and today's conference would identify them and deliberate on suitable response to address those challenges.

#### **INTRODUCTION: Shri M.Kalyanasundaram Chief Executive of INAFI India,**

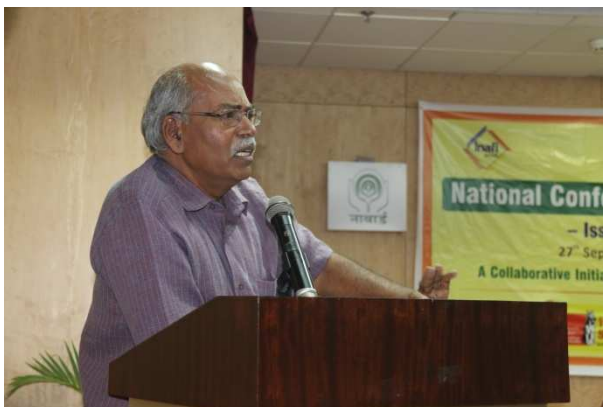


Introducing the Objectives of the conference, Shri M. Kalyanasundaram Chief Executive of INAFI India, informed that PMFBY is a vastly improved version of earlier crop insurance schemes. Farming of crops has to contend with

multiple risks and vulnerabilities' and the covariant nature of risks make the crop insurance tricky and challenging. It has been the global experience that while crop insurance is a necessary risk financing instrument it is not sufficient to provide adequate cover for the financial impact of all the risks in farming crops. From financial inclusion perspective it is quite critical for small farmers. Banks being the focal points for implementation is a practical advantage for the farmers in terms of access and larger reach. The involvement of the insurance companies as underwriters would bring greater efficiency and improved service. Shri M.Kalyanasundaram pointed out that the greater challenge lies in making the crop insurance – PMFBY more inclusive and universal. He expressed the hope that the National Conference on crop insurance would have focussed deliberations in identifying the issues and challenges and suitable measures to overcome them.

## **Perspectives on Crop Insurance**

**Shri M.P.Vasimalai, Executive Director, DHAN Foundation, Madurai**



He expressed that due to Climate Change over which the entire world is now clueless, monsoon has become totally unpredictable and in this scenario, to give protection to the farming community, we need to have lot of localised ecological studies and based on which the entire farming and agricultural practices are to be overhauled. Coming back to the crop insurance scheme, he felt that the existing scheme provides cover

only against production risk whereas the market Risk which causes huge income loss to the farmers is totally left out.

He referred to various non- monetised risk mitigation agronomic practices such as mixed cropping , tank silt application , micro irrigation etc which insulates the farmers against income loss and suggested that such practices are to be documented and scaled up for wider adoption. He further observed that penetration and retention is very low in case of crop insurance scheme as it continues to remain as supply driven and the challenge is to make it centric towards demand driven. And this could be possible only by bringing awareness to the farmers about the benefits of crop insurance and probably showcasing the farmers compensated for their crop loss through risk cover in forums such as Maha Sabha may facilitate out reaching the community in large numbers at a faste pace.

Reiterating the importance of financial literacy, he appealed to all insurance companies to allocate sufficient funds out of their CSR for imparting literacy on crop insurance.

He also exhorted all the NGOs of the network NGOs to hold similar State Level Seminars/ Conferences on crop insurance in strategic locations and also organise training programmes for farmers. To reach out to millions of farmers as quickly as possible, social capital developed in the form of SHGs and FPOs should be effectively used as enabling platforms.

**SPECIAL ADDRESS: Shri M Mohan Reddy, Convener- SLBC and GM, Syndicate Bank, Karnataka State**

Shri M Mohan Reddy, Convener- SLBC and GM, Syndicate Bank, Karnataka State. He looked at PMFBY with different perspectives - For the Govt, the scheme focuses on maximum outreach of farming



community with limited subsidy outgo for the farmers, it provides maximum risk cover with minimum amount of premium payable; and for the Insurance Company, the scheme gives them sustainable business with decent profit.

On implementation, he observed that comparing Insured Area with Crop Sown Area may lead to avoidable disputes and in the absence of digitization of land records such comparisons may not give a realistic picture. Notwithstanding such limitations, he opined that PMFBY is a far better scheme but still its effectiveness would be realised only on implementation.

**INAUGURAL ADDRESS: Shri M.I.Ganagi, Chief General Manager, NABARD, Bangalore**



Shri.M.I.Ganagi, Chief General Manager, NABARD, Bangalore

Dwelling on climate change, he said that weather adversity is crippling agriculture, globally and in

this , the magnitude is huge in India where more than two third of cultivated area depends on monsoon rains. Monsoon is also not equitably distributed and for instance, in Assam, while it experienced overall rainfall deficit of 5% in Kharif 2016, it was still facing the problem of heavy floods which indicates that the rainfall distribution was not uniform. Indian agriculture encounters two major risks - production and Market wherein production risk is mitigated mainly through crop insurance.

Tracing the evolutionary process of crop insurance scheme in our country, he was mentioning that crop insurance as a business proposition was not sustainable for the insurance companies as their pay out was ranging 600-800% of premium collected. But still, the farmers are also not satisfied as the scheme operates on area basis only and not on individual farm level basis.

On implementation of PMFBY, he observed that Crop Cutting Experiments would be a big challenge and technology has to come into play to make it less cumbersome and more realistic.

The experience shows that the crop insurance scheme is riddled with more moral hazards wherein bogus claims mar the schemes. The demand - supply market mechanism is also tweaked in so far as crop insurance is concerned - when there is huge demand from the farmers side, the insurance companies shy away and when the insurance companies push the product, farmers do not evince much interest.

On claim settlement, he was sharing an instance of Groundnut crop in Gujarat State taking major share on pan India basis indicating possible misuse of scheme guidelines.

As regards providing risk cover to tenant farmers, he expressed his apprehension over the feasibility as the banks financing the tenant farmers itself remains only in paper.

Sum Assured is a variant of Scale of Finance and that being the case, scale of finance for any given crop should be scientific. But there exists wide variation in Scale of Finance for a given crop even among the neighbouring districts and this brings lot of disparity among the farmers while settling the claims.

## **SESSION: 1 PMFBY AND ITS OPERATIONAL ISSUES AND CHALLENGES**



Presentation by Shri. B.R.Hiremath, Assistant General Manager, Syndicate Bank, Priority sector & Regional Bank Department, Karnataka State, Shri. B.R.Hiremath shared the experience of Syndicate Bank in promoting Prime Minister's Fasal Bhima Yojana (PMFBY)

### **About the Scheme**

The Hon'ble Prime Minister launched a new crop insurance policy on 13.1.2016 named Pradhan Mantri Fasal Bima Yojana (PMFBY) and made effective from Kharif-2016 season by replacing NAIS & MNAIS.

The new crop insurance scheme has a rebated premium rate on the principal sum insured.

### **The objectives of the scheme:**

- To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.

- To stabilize the income of farmers to ensure their continuance in farming.
- To encourage farmers to adopt innovative and modern agricultural practices
- To ensure flow of credit to the agriculture sector.

### **Implementing Agency:**

#### ➤ **Multi agency framework**

1. The Ministry of Agriculture and Farmers Welfare (MoA &FW), Govt of India
2. The concerned State Govts.
3. Financial Institutions like Commercial Banks, Coop Banks, Regional Rural Banks and their regulatory bodies
4. Govt departments viz., Agriculture, Cooperation, Horticulture, Statistics, Revenue, Information/Science & Technology, Panchayat Raj, etc.

### **UNIT OF INSURANCE:**

- The Scheme shall be implemented on an ‘Area Approach basis’
- Defined Area (i.e., unit area of insurance) is Village / Village Panchayat level by whatsoever name these areas may be called for major crops and for other crops it may be a unit of size above the level of Village / Village Panchayat.

### **CROPS AND NOTIFIED AREA:**

- The Scheme can cover all the Crops for which past yield data is available and grown during the notified season, in a Notified Area and for which yield estimation at the Notified Area level will be available based on requisite number

of Crop Cutting Experiments (CCEs) being a part of the General Crop Estimation Survey (GCES).

- Notified Area is the Unit of Insurance decided by the State.
- States notify Village / Village Panchayat as insurance unit in case of minor crops.

### **PREMIUM RATES**

<b>Sl. No.</b>	<b>Season</b>	<b>Crops</b>	<b>Maximum Insurance charges payable by farmer (% of Sum Insured)</b>
1	Kharif	Food & Oilseeds crops (all cereals, millets, & oilseeds, pulses)	<b>2.0%</b> of SI or Actuarial rate, whichever is less
2	Rabi	Food & Oilseeds crops (all cereals, millets, & oilseeds, pulses)	<b>1.5%</b> of SI or Actuarial rate, whichever is less
3	Kharif & Rabi	Annual Commercial / Annual Horticultural crops	<b>5%</b> of SI or Actuarial rate, whichever is less

### **ISSUES & CHALLENGES:**

1. Farmers' movements have been demanding a comprehensive relief-cum-insurance scheme that is universal in its coverage-

All farmers,

All crops,

All forms of damage and

At every stage of crop cycle,

Affordable for the farmers,

Adequate compensation amount,

Quick and simple ways of assessing crop damage.

1. Declaration / Notification of crops / area by states may be done in advance to increase coverage.
2. Awareness creation among farmers jointly by Govt, Banks, Insurance companies and other NGOs.
3. Inter crops / mixed crops – per acre Sum Insured to be properly devised.
4. Issues of non-Loanee farmers- Enrolment of Non-Loanee farmers need to happen only in service area bank branches to avoid duplication of enrolment and mis-use of the scheme.
5. Digitalization of land records is a challenge to avoid duplication of enrollment and thereby to address the issue of Acreage Discrepancies and subsequent cut in the claim settlement.
6. The anomaly in fixing of Scale of finance in various states and in different districts in the same state has distorted the scheme guidelines
7. The compensation in the form of Insurance claim is restricted to Input cost / cost of cultivation and hardly addresses the risk crop yield losses.
8. The loaning date created more confusion in coverage of loanee farmers. Hence, more clarity as regards to eligibility needs to be made in advance for smooth implementation.
9. Instead of depending only on Banks to register for Crop Insurance, other institutes like crop insurance companies, / kiosks / Private partners/ Govt Departments etc may be rolled in to increase coverage.
10. Steps to be taken to delink enrolment of cultivators from Banks being used as the transaction points by insurance

companies. When all loanee & non-loanee farmers are covered directly by the crop insurance company, it has to come forward (rather than being invisible hiding behind the bankers as of today), the accountability in the entire process of insurance will be more explicit & in favour of farmers.

11. Oral Lessees, Share croppers, Tenant Farmers, JLG/SHG members and farmers without proper land records.
12. The unit of crop damage / crop loss assessment may be to the village & if possible to the individual farm may be explored.
13. Crop cutting Experiment has some issues in mono-crop farmers as compared to multi-crop farmers.
14. Difficulty for integration of Crop Insurance portal with CBS of Banks for seamless uploading of data by banks.

**Presentation by Shri.Jangarappa, KSC Apex Bank, Bangalore  
Pradhan Mantri Fasal Bima [PMFBY]**

**Farmers Perspective**

**Key Features**

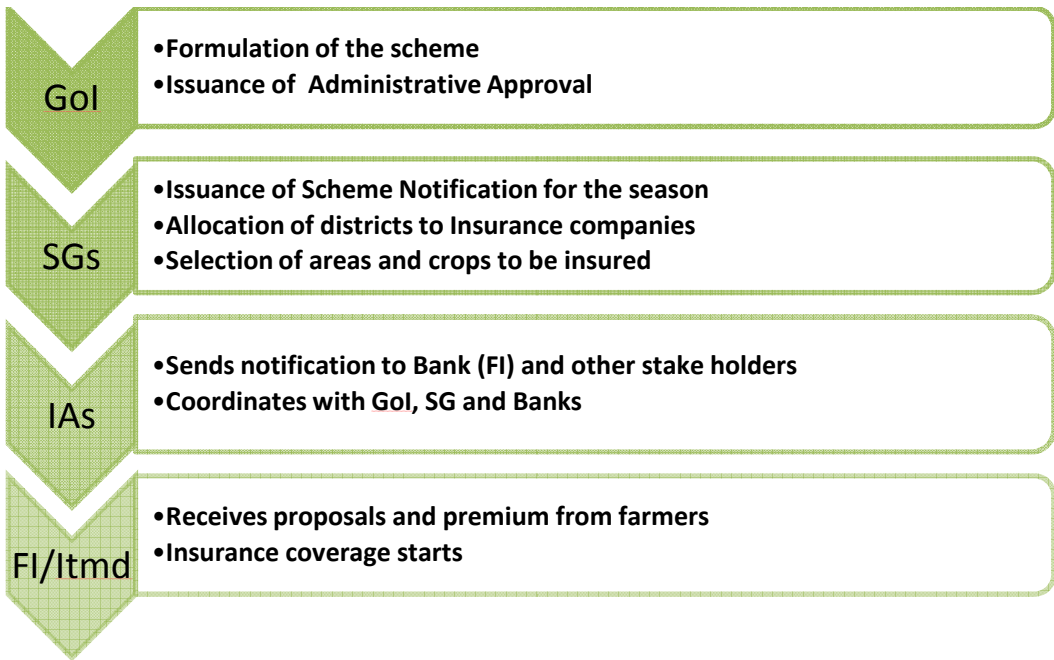
- Crops Covered : Food Crops (Cereals, Millets and Pulses)  
Oil Seeds  
Annual Commercial/Annual  
Horticultural Crops
- Farmers Covered : Loanee Farmers – Compulsory  
Non Loanee Farmers - Optional
- Sum Insured : District-wise, crop wise Scale of Finance

- Farmer Premium : Kharif 2%,  
Rabi 1.5% and  
AC/AH Crops - 5%
- Commercial Premium – Farmer Premium = Subsidy  
(50:50 by State & Central)
- Scheme Approach : Area approach for wide spread risks  
individual approach for Localised calamities
- Localised Calamities : Hailstorm, Landslide and Inundation

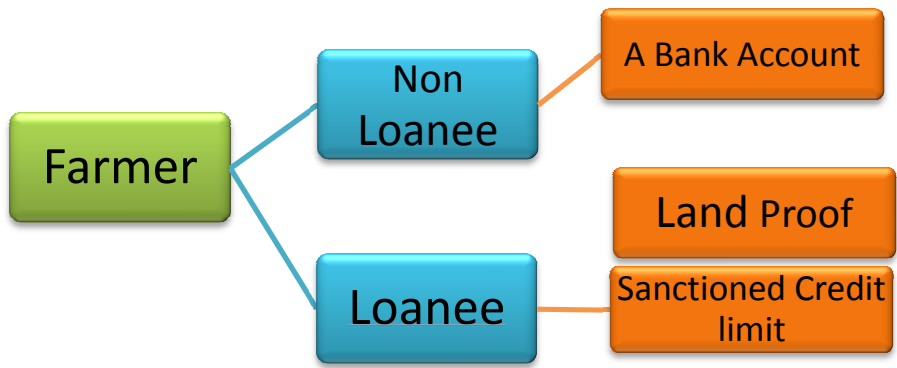
#### Risks Covered

- Season End Claim:  
$$\frac{(\text{Threshold Yield} - \text{Actual Yield}) \times \text{Sum Insured}}{\text{Threshold Yield}}$$
- On Account Payment: Mid season adversity  
Expected Yield < 50% of Threshold Yield  
25% of Likely Claims
- Prevented Sowing: >75% of Area un sown  
Up to 25% of Sum Insured  
Further insurance cover would terminate
- Post Harvest Loses: For Major crops left in 'cut & spread'  
Cyclonic and Unseasonal rains  
Intimation within 48 Hours  
Up to 14 days of Harvest

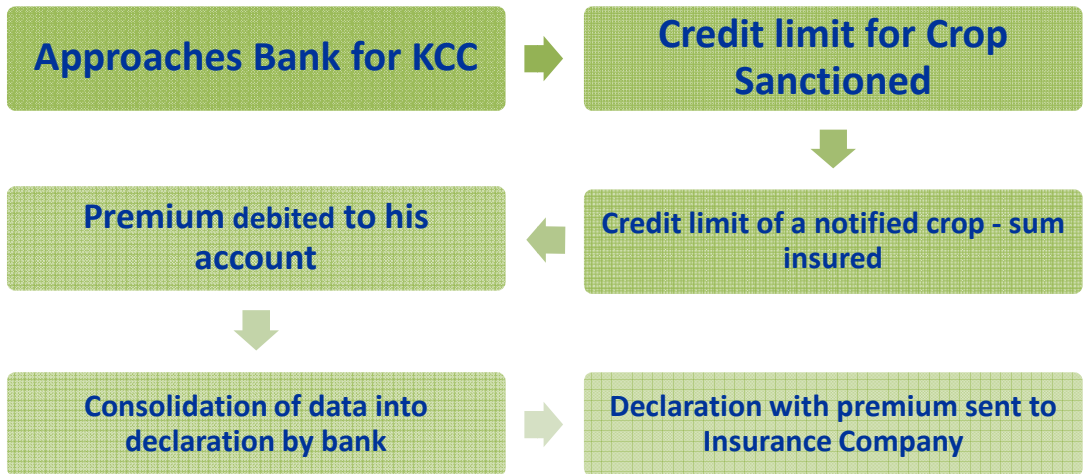
## Roles of Agencies



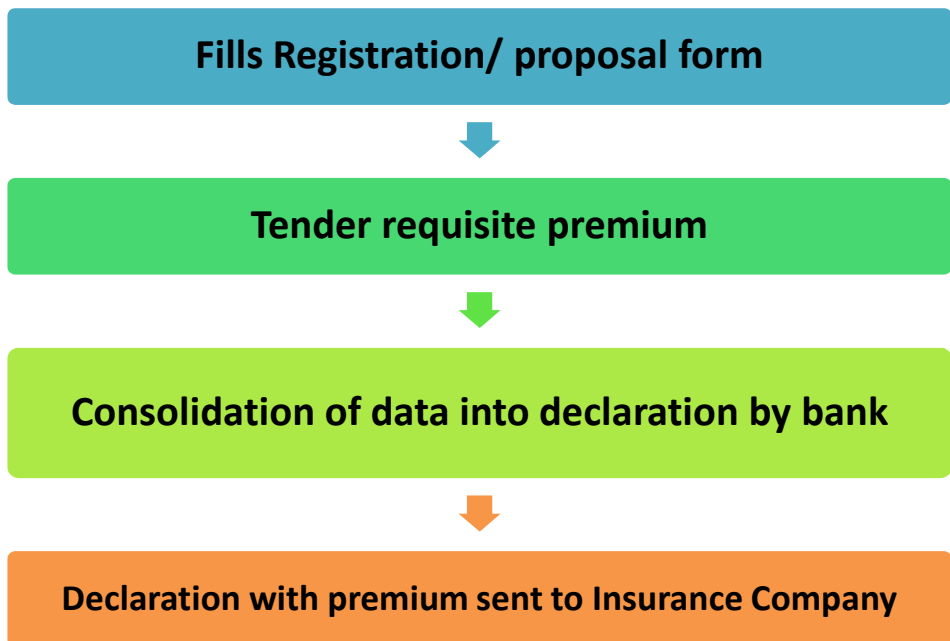
## Requirements for Coverage



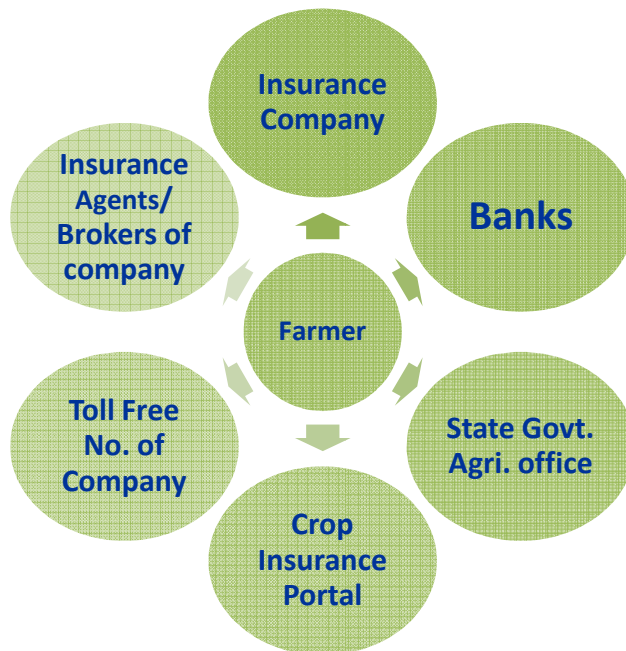
### Loanee Farmers – Flow



### Non Loanee Farmers – Flow



## Information on Crop Insurance



### **Presentation by Shri. C.Santhalingam, Deputy General Manager, Priority Credit, Canara Bank, Bangalore**

He shared his experience of Canara Bank in promoting Prime Minister's Fasal Bhima Yojana (PMFBY)

#### **INTRODUCTION**

- PMFBY introduced by Department of Agri & Co-Operation and farmers welfare, GoI w.e.f. 23.02.2016
- The Department developed a Crop Insurance Portal ([www.agri-insurance.gov.in](http://www.agri-insurance.gov.in)) for administration of Crop Insurance Scheme.

## **LIMITATIONS OF PREVIOUS SCHEME:**

- Multiple loans/multiple crop insurance.
- Delay in submission of declaration
- Delay in settlement of Claim
- No online Package for extraction of reports.
- Non availability of accurate data for proper monitoring.

## **ADVANTAGES OF PMFBY**

- Reduced Premium Rates
- Transparency in implementation. Opportunity for all General ins Companies to participate
- Elimination of Manual process
- Arrival of sum assured as per scale of finance
- Avoiding multiple loaning / multiple crop insurance
- Speed up delivery – Coverage, Settlement
- Unify fragmented databases, Single view of data
- Availability of accurate data on real time basis for proper monitoring and future planning.

## **OPERATIONAL ISSUES**

### **1. State-wise Notifications**

- State-wise Notifications are issued, majority of which are in local languages only. All the notifications can be issued in two languages, out of which can be local language of that State.
- Notification by all States to be made available in the portal invariably – So that all Stake holders can view & act.
- Many States have not issued notification within the deadline resulting in many eligible farmers missing out.

## **2. Changes in Operational Guidelines**

- During the Kharif season, many changes made in the Operational Guidelines during the Scheme period, created confusion. Example:- Eligibility of Restructured accounts, etc.

## **3. Formats of Insurance Companies – No Uniformity**

- Different Insurance Companies seeking data in different formats. There is no need for such formats and they should go with the portal data base only
- Application forms for non loanee farmers can be standardized.

## **4. Change in crop by the farmer without informing Bank**

- Cases of farmers changing the crop after insurance.

## **5. Farmers requesting for exclusion**

- Resistance of some farmers for debiting premium from their account

## **6. Portal Issues**

- Complexity in data feeding as many Branches are having more than 1000 applications, 34 field per application.
- Connectivity issue in accessing portal by remote Branches.

## **CHALLENGES**

- Additional Work load for rural Semi urban Branches of Banks.
- Farmers' concern over the Scheme.
- Coverage of non Loanee farmers
- Separate portal in some States.

- Scale of finance – Not standardized leading to low value of coverage.
- Coverage of large number of farmers in a short span of time.
- Lack of Coordination between different Implementing agencies.
- Proposed Changes in uploading of Farmer Application in Portal

## **SUGGESTIONS**

1. Linking CBS data to portal for automatic extraction of India.
2. Taking on Board farmers, farmers associations
3. Identifying & excluding areas not prone to crop failures
4. Single portal all across the country.
5. Sharing of a part of premium with Banks to be used to strengthen the infrastructure at rural Branches.
6. State level and central level Coordination committees.
7. Improving present system of data uploading in portal thro excel sheets instead of withdrawing the system and going for individual entries.

## **POSITIVES**

1. Branding, National Level Awareness.
2. Higher level of involvement of Stake holders
3. Use of Technology – Efficiency of delivery Bound to improve further
4. Involvement of more insurance Companies. More expertise.
5. Strong insurance product helps the Bank in improved recovery and avoiding process like restructuring.

## CONCLUSION

Despite all the issues & challenges, it's a great initiative of Government of India, which will be successful only if all the implementing agencies perform their role in an effective manner.

There is a quote from Will Rogers:-

**“The farmer has to be an optimist or (S)He wouldn't be a farmer”**

PMFBY is a great initiative form making every farmer an optimist and make them they feel secure.

**Presentation by Shri. Joseph, Zonal head, Universal Sompo International, Bangalore**



He shared his experience on Crop Insurance

## INTRODUCTION

### USGIC diversification in Crop Insurance

- USGIC is the joint venture of Allahabad Bank, Indian Overseas Bank, Karnataka Bank, Dabour Investment.
- The Company received the License and Certificate of Registration from Insurance Regulatory and Development Authority in November 2007.
- USGIC started doing business in Crop Insurance Sector w.e.f April'2014.
- In financial year-2014-15, We have written Crop Insurance Business in U.P, Chhattisgarh.

- We diversify our business by participating in Rajasthan, Uttarakhand and U.P in FY'2015-16.
- For FY'2016-17, USGI has selected for two clusters in Karnataka to do crop insurance business for Kharif'2016. There are 20 districts in these two clusters of Karnataka.

### **USGIC Notified Clusters and Districts in Karnataka**

<b>Cluster 1</b>	<b>Cluster 2</b>
HAVERI	TUMKUR
GADAG	KALABURGI
BELAGAVI	VIJAYAPURA
BELLARY	HASSAN
BAGALKOTE	CHIKABALLAPURA
DAVANGERE	UTTARA KANNADA
KODAGU	RAICHUR
BANGALORE RURAL	KOLAR
BANGALORE URBAN	CHICKKAMAGALURU
RAMANAGARA	CHAMARAJA NAGARA

### **PMFBY-Karnataka**

#### **Kharif-2016**

- Universal Sompo General Insurance Company has been effectively catering to the insurance requirement of the customers of the State of Karnataka through its Zonal Office at Bangalore and Branch Offices at Bangalore, Hubli,

Mangalore, Mysore and Shimoga, with Relationships Managers present at various other districts, throughout the length and breadth of the State. USGIC also has the distinct advantage of the JV partner Bank branches for insurance distribution.

- We have deputed two USGI employees in each district for the further communication with Banks and other Government department to cover more farmers in Kharif'2016.

### Notified Districts and no. of KBL Branches



**Note: Ramanagara & Bangalore Rural total KBL Branches are 10**

## **Maximizing Loanee Farmers Coverage Strategy**

- **Kisan Credit Card (KCC) Detail:** We covered bank wise and branch wise KCC and loan disbursement detail of each branch so that we can cover all the farmers at our earliest and we could provide crop insurance to all mandatory loanee farmers.
- **Premium Collection:** For WBCIS, June 30, 2016 is the cut-off date for collection of premium and For PMFBY, Aug 10, 2016 is the last date for collection of premium so to reduce the burden of the bank official we appoint a USGI employee as per banks' requirement to help them deduction of premium from farmers' account.
- **Training Program:** We also arrange a training program for the branch manager regarding web based software <https://www.samrakshane.karnataka.gov.in> and other proposal form related queries.

## **Maximizing Non Loanee Farmers Coverage Strategy**

- **Non - Loanee Coverage:** To maximize the size of the premium we also covered non-loanee farmers. We had covered **143,928** non-loanee farmers in 20 districts. To achieve this target we communicate with various government department and agencies viz. **Raita Samparka Kendra, Rural Development and Panchayat Raj Department, Gram Panchayat Office.**
- **Raita Samparka Kendra (RSK):** These kendras are established to provide technical information on crop selection, crop production related know-how, market information etc., to farmers. Most of the Non- Loanee farmers usually visit these Kendra to get the agriculture related information. As these Centres are establish at Hobli level and approximate number of RSK is 529 where USGI is doing Crop Insurance

Business so we had approach these Kendra to communicate with these farmers regarding Crop Insurance to cover more and more non - loanee farmers.

- **Rural Development and Panchayat Raj Department:** Hobli and Gram Panchayat is the notify unit in Kharif-2016. We had also approached Gram Panchayat Office so that we can cover more non – loanee farmers.
- **Gram Panchayat Office:** There is a village accountant in each Gram Panchayat Office so he/she helped us to notify Non-Loanee Farmers. We had approached these farmers through various promotional activities to ensure maximize these non - loanee farmers.

### **Karnataka Business Statistics (PMFBY)**

PMFBY							
Cluster	District Name	Loanee Farmer			Non-Loanee Farmer		
		No of Enrollment	Premium Amt. (Rs)	Area (Ha.)	No of Enrollment	Premium Amt. (Rs)	Area (Ha.)
Cluster 1	Bagalkot	35,207	45,244,991	44,436	3,591	4,161,321	5,830
Cluster 1	Ballari	25,436	95,197,739	44,793	2,093	3,434,702	3,615
Cluster 1	Belagavi	10,501	24,960,380	13,634	37,983	55,146,007	55,954
Cluster 1	Bengaluru Rural	294	428,187	227	747	424,155	561
Cluster 1	Bengaluru Urban	145	364,207	90	229	159,596	174
Cluster 2	ChamarajNagar	2,825	8,671,912	2,667	15,778	10,887,590	15,559
Cluster 2	Chikkaballapur	2,180	5,933,781	1,600	3,371	3,431,688	3,467
Cluster 2	Chikkamagaluru	4,151	8,267,922	2,686	1,286	814,517	1,380
Cluster 1	Davangere	23,260	36,532,145	25,805	1,727	2,662,892	3,064

Cluster 1	Gadag	47,320	136,882,186	67,682	17,588	25,192,408	32,962
Cluster 2	Hasan	5,651	10,784,078	4,374	5,002	3,961,681	4,065
Cluster 1	Haveri	71,187	124,410,582	77,292	16,590	26,912,874	22,754
Cluster 2	Kalaburgi	97,815	107,740,020	131,097	834	1,311,373	1,617
Cluster 1	Kodagu	3,248	1,698,038	2,966	172	95,778	159
Cluster 2	Kolar	3,184	3,222,228	2,850	9,141	5,701,247	7,855
Cluster 2	Raichur	30,918	91,730,086	59,361	578	889,935	1,099
Cluster 1	Ramanagara	286	125,494	209	336	121,607	238
Cluster 2	Tumakuru	18,832	22,355,091	25,119	7,381	5,302,039	7,533
Cluster 2	UttarKannada	44,295	37,803,975	37,032	371	458,523	434
Cluster 2	Vijayapura	6,418	13,031,171	11,595	8,838	11,274,009	13,633
<b>Total</b>		<b>433,153</b>	<b>775,384,210</b>	<b>555,514</b>	<b>133,636</b>	<b>162,343,943</b>	<b>181,955</b>

## Karnataka Business Statistics (WBCIS)

WBCIS							
Cluster	District Name	Loanee Farmer			Non-Loanee Farmer		
		No of Enrollment	Premium Amt. (Rs)	Area (Ha.)	No of Enrollment	Premium Amt. (Rs)	Area (Ha.)
Cluster 1	Bagalkot	175	1,624,083	244	170	1,193,086	185
Cluster 1	Ballari	990	6,841,520	1,730	62	570,854	97
Cluster 1	Belagavi	277	1,307,723	221	1,098	4,664,105	804
Cluster 1	Bengaluru Rural	416	2,470,752	239	17	54,344	7
Cluster 1	Bengaluru Urban	208	648,460	84	17	79,593	12

Cluster 2	ChamarajNagar	1,164	4,472,860	1,232	15	37,458	11
Cluster 2	Chikkaballapur	209	3,410,509	140	74	464,546	75
Cluster 2	Chikkamagaluru	13,235	62,334,774	15,816	35	167,960	48
Cluster 1	Davangere	4,472	24,092,677	5,054	159	939,057	203
Cluster 1	Gadag	17	131,546	26	8	71,308	12
Cluster 2	Hasan	9,372	31,999,013	10,546	70	214,760	66
Cluster 1	Haveri	2,202	8,264,317	1,629	1,748	7,141,458	1,292
Cluster 2	Kalaburgi	363	2,735,197	500	93	446,551	85
Cluster 1	Kodagu	3,883	12,431,585	5,940	565	1,244,713	633
Cluster 2	Kolar	131	748,257	190	1,687	7,278,310	1,924
Cluster 2	Raichur	152	1,655,311	311	25	226,133	34
Cluster 1	Ramanagara	831	3,385,546	578	25	170,385	22
Cluster 2	Tumakuru	11,160	55,806,425	12,321	3,332	21,038,843	3,340
Cluster 2	UttarKannada	6,821	36,808,843	3,306	17	85,033	9
Cluster 2	Vijayapura	1,079	4,614,369	1,046	1,075	4,816,489	906
<b>Total</b>		<b>57,157</b>	<b>265,783,767</b>	<b>61,152</b>	<b>10,292</b>	<b>50,904,984</b>	<b>9,767</b>

## Karnataka Business Statistics (Total)

Total							
Cluster	District Name	Loanee Farmer			Non-Loanee Farmer		
		No of Enrollment	Premium Amt. (Rs)	Area (Ha.)	No of Enrollment	Premium Amt. (Rs)	Area (Ha.)
Cluster 1	Bagalkot	35,382	46,869,074	44,679	3,761	5,354,407	6,015
Cluster 1	Ballari	26,426	102,039,258	46,523	2,155	4,005,555	97
Cluster 1	Belagavi	10,778	26,268,102	13,855	39,081	59,810,112	804
Cluster 1	Bengaluru Rural	710	2,898,939	467	764	478,498	7
Cluster 1	Bengaluru Urban	353	1,012,667	174	246	239,189	12
Cluster 2	ChamarajNagar	3,989	13,144,772	3,898	15,793	10,925,048	11
Cluster 2	Chikkaballapur	2,389	9,344,290	1,739	3,445	3,896,234	75
Cluster 2	Chikkamagaluru	17,386	70,602,696	18,502	1,321	982,477	48
Cluster 1	Davangere	27,732	60,624,822	30,860	1,886	3,601,949	203
Cluster 1	Gadag	47,337	137,013,732	67,709	17,596	25,263,716	12
Cluster 2	Hasan	15,023	42,783,090	14,920	5,072	4,176,441	66
Cluster 1	Haveri	73,389	132,674,899	78,921	18,338	34,054,332	1,292
Cluster 2	Kalaburgi	98,178	110,475,218	131,598	927	1,757,925	85
Cluster 1	Kodagu	7,131	14,129,623	8,906	737	1,340,491	633
Cluster 2	Kolar	3,315	3,970,484	3,040	10,828	12,979,557	1,924
Cluster 2	Raichur	31,070	93,385,396	59,671	603	1,116,068	34
Cluster 1	Ramanagara	1,117	3,511,040	787	361	291,992	22

Cluster 2	Tumakuru	29,992	78,161,516	37,440	10,713	26,340,882	3,340
Cluster 2	UttarKannada	51,116	74,612,817	40,337	388	543,556	9
Cluster 2	Vijayapura	7,497	17,645,540	12,641	9,913	16,090,497	906
<b>Total</b>		<b>490,310</b>	<b>1,041,167,977</b>	<b>616,666</b>	<b>143,928</b>	<b>213,248,927</b>	<b>15,597</b>

### **Karnataka Business Statistics (Cluster1 & 2)**

Scheme	Loanee Farmer (Rs. Cr.)	Non Loanee Farmer (Rs. Cr.)	Farmer Premium (Rs. Cr.)	Loanee Farmer Enrollment	Non Loanee Farmer Enrollment	Total Farmer Enrollment	Loanee Area (Ha.)	Non Loanee Area (Ha.)	Total Area (Ha.)
WBCIS	28	4	32	57,157	10,292	67,449	61,152	9,767	70,919
PMFBY	83	11	94	433,153	133,636	566,789	555,514	181,955	737,469
<b>Total</b>	<b>111</b>	<b>14</b>	<b>125</b>	<b>490,310</b>	<b>143,928</b>	<b>634,238</b>	<b>616,666</b>	<b>191,721</b>	<b>808,387</b>

### **SESSION: 2 Experience sharing on various Crop Insurance experiments including mutual crop insurance cover panel:**

#### **Presentation by Shri.Manoj Menezes, Director (Agri), SKDRDP, Dharmasthala**



He shared his experience on Crop Insurance

What is prevented sowing?

When it is applicable?

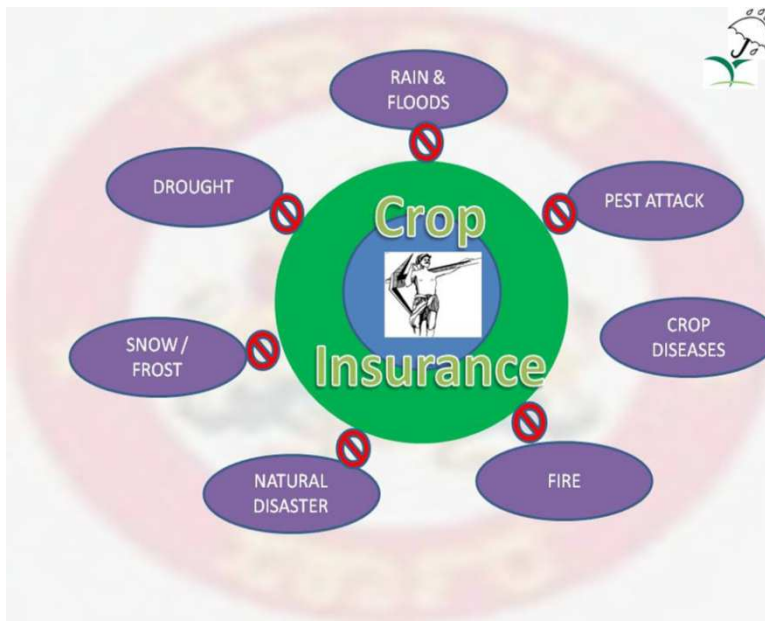
Is it area based or individual farmer wise? What happens to policy in such cases? It is proposed to provide insurance cover to farmers in case of widespread incidence of eligible risks

affecting crops in more than 75% of area sown in a notified unit at early stage leading to total loss of crop or the farmers not being in position to either sow or transplant the crop.

### Review of Agricultural Insurance Literature

- In the absence of formal risk sharing / diffusion mechanisms, farmers rely on traditional modes and methods to deal with production risk in agriculture.
- Many cropping strategies and farming practices have been adopted in the absence of crop insurance for stabilizing crop revenue.
- Availability and effectiveness of these risk management strategies or insurance surrogates depend on public policies and demand for crop insurance.

### Concept of Crop Risk Management



## **Crop insurance / Weather Based 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.
- Weather Based Crop Insurance aims to mitigate the hardship of the insured farmers against the likelihood of financial loss on account of anticipated crop loss resulting from incidence of adverse conditions of weather parameters like rainfall, temperature, frost, humidity etc.

### **Difference....**

Crop Insurance specifically indemnifies the cultivator against shortfall in crop yield,

Weather based Crop Insurance is based on the fact that weather conditions affect crop production even when a cultivator has taken all the care to ensure good harvest.

In other words,

WBCI uses weather parameters as 'proxy' for crop yields in compensating the cultivators for deemed crop losses.

### **Farmers Experience of WBCI**

- Being a new concept, high level of transparency was / is maintained through out
- After every period of insurance some improvements were made based on feedback received and also on internal research and experience.
- Limitations are many like –

Distance of the farm from the weather station, non-coverage of perils other than weather, wider sowing / planting window of the crop, differences in soil types & management practices, shift in climatic & weather patterns, etc. leading to weak correlation between the yield and the weather indices, etc

### **Benefits of Crop Insurance**

- The benefits of crop insurance vary depending on the nature and extent of protection provided by the scheme.
- The crop losses are borne by farmers in other areas or the reserves accumulated through premiums in good years can be used to pay the indemnities. Thus, a good crop insurance program combines both self as well as mutual help principle. Crop insurance brings in security and stability in farm income.
- Crop insurance protects farmers' investment in crop production and thus improves their risk bearing capacity.
- Crop insurance facilitates adoption of improved technologies, encourages higher investment resulting in higher agricultural production.
- Crop credit insurance also reduces the risk of becoming defaulter of institutional credit..
- A properly designed and implemented crop insurance program will protect the numerous vulnerable small and marginal farmers from hardship, bring in stability in the farm incomes and increase the farm production
- A farmer may grow more profitable crops even though they are risky. He may adopt improved but uncertain technology when he is assured of compensation in case of failure
- Access and availability of insurance, changes the attitude of the farmer and induces him to take decisions which, otherwise, would not have taken due to aversion to risk. For

example, rain-fed paddy was cultivated in one of the riskiest districts of Sri Lanka, for the first time in 1962, as insurance facility was available to the farmers.

- The availability of formal instrument for diffusion of risk like crop insurance will facilitate farmers to adopt risky but remunerative technology and farm activities, resulting in increased income.

## **Weather Risk coping mechanisms of farmers**

### **Risk Prevention**

- Not growing the particular crop during the years of late onset of monsoon
- Leaving the land fallow
- Diversification to tree crops
- Shifting to other allied agricultural livelihoods
- Migration

### **Risk Reduction**

- Inter/Mixed cropping
- Drought resistant crops
- Low investment crops

### **Risk Finance**

- Crop insurance

## **Rainfall Indexed Crop Insurance experiences**

- The problems faced were :
- ‘Spatial basis risk’, due to large variations between villages and the reference weather station in experiencing rainfall.
- Insurance companies were not able to offer customized policies on a micro scale.

- The weather insurance product triggers could not reflect the relationship between crop performance and rainfall.
- Presently, the climate change is significantly felt by the farmers through the rainfall pattern changes

### **Rainfall Indexed Crop Insurance**

- Location specific
- Effective in reducing ‘Spatial basis risk’ by installing village rain gauges as reference weather stations
- In house design, implementation and decision making involving the local community and thereby increasing their ownership and awareness
- Motivating the farming community in prevention of risks
- Feeling of mutuality and understanding as farmers are the insurers and insured.
- Operationalization through Mutual Insurance Committee of wiser farmers.

**Need based product development** – Pro farmer and contextualized products for Paddy, Chilies, Bajra, Jowar, Cotton, Maize, Black gram, Green gram and Groundnut

### **Covered rainfall risks of crops**

- Risks of deficiency of rainfall during critical periods of the crop
- Dry spell during the critical water requirement stages of the crop
- Excess rainfall risks during the stages of non water requirement of the crop – harvest stage etc

## **Learnings from Rainfall Insurance**

- Spatial basis risk is the vital factor that works against the industry's weather insurance product access, where claim payouts are decided on the basis of rainfall recordings at block level. Such larger area involves rainfall variations among the villages thus resulting in non representative nature of rainfall to field reality
- Village level rain gauges reduces the spatial basis risk significantly and facilitating design of contextualized weather insurance products
- Micro climates exist even within these small geographies
- Our experience on rainfall indexed crop insurance has brought out the existence of micro climates.
- Significant variation in rainfall pattern and quantum among village rain gauges

## **Temporal basis risks**

- In rain fed agriculture, the cropping season is in tune with onset of monsoon.
- The product designed with an ostensible sowing date would not be appropriate, if the sowing dates differ.
- This is addressed through
  - Products with different weekly sowing date scenarios
  - Dynamic sowing date
  - Product design based on actual sowing date

## **PRODUCT BASIS RISKS**

Product basis risk arises when the insured farmers are not able to appreciate that the rainfall claim is not triggered especially when there is crop loss.

They need to understand that only rainfall risks are covered and not the crop loss risks.

This can be addressed by involving farmers in product design and intense insurance literacy efforts.

### **Risk Coping Strategies**

- Operational agro meteorological services eg., use of seasonal forecasts in agriculture, forestry, and land management with strategic relevance to national policy with respect to planning to help alleviate food shortages, coping with drought and desertification etc.,
- Use of integrated agricultural management, crop simulation models and climate forecast systems to reap the highest benefit.
- Minimization of pesticide application through understanding the relationship between meso- and microclimate, and the effects on the cycles of disease agents and prediction of climatic influences
- Contingency planning to alleviate the increasing costs of impacts,
- Surface irrigation, minor irrigation, steps to reduce excessive groundwater utilization, increased efficiency in the rain fed areas and crop diversification for efficient water use
- Technological innovations (direct seeded rice (DSR) cropping system to increase net income)
- Local indigenous knowledge (coping mechanisms of farmers to various environmental and natural challenges)
- Improved cultural/farming practices (tillage, sequence of cropping, use of crop residues, appropriate soil and water management etc.,)

- Optional use of resources (crop and variety diversification)
- Bundling - Formation of farmers' groups,- Borrow food or money from relatives,- Sale of livestock and small ruminants
- Use of agro-chemicals,- Use of ash to spray farms, Early planting,- Early harvest

### **How Weather based Corp Insurance serves a Mitigation measure?**

- There is a well-established approach to characterizing and managing risks and this includes risk scoping, risk characterization and evaluation, risk management and monitoring and review.
- Preparedness planning, risk assessments, and improved early warning systems can greatly lessen societal vulnerability to weather and climate risks.
- The goal of effective risk management is to impose management and policy changes between hazard events such that the risk associated with the next event is reduced through the implementation of well-formulated policies, plans, and mitigation actions that have been embraced by stakeholders.
- Taking actions to reduce the likelihood of risk event occurring, avoiding the risk, redistributing the risk, and reducing the consequences.
- Enterprise diversification, vertical integration, contracting, hedging, liquidity, crop yield insurance, crop revenue insurance and household off-farm employment or investment.
- Farmers have many options for managing the risks they face, and most use a combination of strategies and tools.
- Weather derivatives and weather index insurance play a role in developing agricultural risk management strategies.

## Illustration how WBCIS operates

### Deficit Rainfall:

CROP STAGE	CALENDAR	TRIGGER	EXIT	PAY-OUT	MAX PAY
	PERIOD	(mm)	(mm)	(Rs./mm)	OUT
Sowing & Germination (21 days)	10 <sup>th</sup> – 30 <sup>th</sup> June	30 mm	10 mm	Rs. 100 per mm	Rs. 2000
		over any 3 consecutive days			
Vegetative phase (31 days)	1 <sup>st</sup> – 15 <sup>th</sup> July	25	5	Rs. 125	Rs. 2500
	16 <sup>th</sup> – 31 <sup>st</sup> July	25	5	Rs. 125	
Flowering & Pegging (31 days)	1 <sup>st</sup> – 15 <sup>th</sup> Aug	40	10	Rs. 100	Rs. 3000
	16 <sup>th</sup> – 31 <sup>st</sup> Aug	40	15	Rs. 120	
Pod Formation & Maturity (45 days)	1 <sup>st</sup> Sept – 15 <sup>th</sup> Oct	80	30	Rs.70	Rs. 3500

The Pay-out under “Vegetative phase” is the average of the 2 fortnights between 1<sup>st</sup> July and 31<sup>st</sup> July. Similarly, the Pay-out under “Flowering & Pod formation” phase is the average of the 2 fortnights between 1<sup>st</sup> to 31<sup>st</sup> August.

*The Maximum Pay-out under “Deficit Rainfall” is Rs. 11000 per hectare*

## Illustration how WBCIS operates

### Excess Rainfall:

CROP STAGE	PERIOD	TRIGGER	TRIGGER	PAY-OUT	MAX PAY
		SPAN (days)	(mm)	(Rs./mm)	OUT
Flowering & Pegging (31 days)	1 <sup>st</sup> – 31 <sup>st</sup> August	2	200	Rs. 7.50	
Pod Formation & Maturity (45 days)	1 <sup>st</sup> Sept – 31 <sup>st</sup> October	2	150	Rs. 7.50	4000

TOTAL SUM INSURED – RS. 15000 PER HECTARE

PREMIUM RATE – 12.22%

TOTAL PREMIUM – RS. 1833 PER HECTARE

## Decision to go for WBCI..... Can I?

**Certainly following queries would help you to make this decision:**

- (i) *What is your risk exposure?* Are crop losses likely to occur on your farm & if they occur, do you have rough idea of the value (is your area prone to drought/floods / frost / heat etc)?
- (ii) *How large a loss can you afford* (through your cash/bank balance/other reserves that you may plan for bad times/any major expense planned by you like for a wedding or a function etc)?
- (iii) What are you crop insurance options?(Kindly keep in mind that AIC is a Government created entity serving farmers with sole commitment in the field of crop insurance)
- (iv) How many farmers do AIC cover? (About 2 crore farmers annually) (v) Can I afford the cost of insurance? (You have to pay a very nominal premium on **account** of the Government subsidy)

## SKDRDP and crop insurance 2015-16

Sl.No.	Crops	Details	Farmers (lakhs)	Area (lakh acres)
1	Food crops	Paddy, Jowar, Maize , Millets	0.67	0.86
2	Pulses & oil seeds	Grams, sunflower,. Ground nut,	0.43	0.58
		<b>Total:</b>	<b>1.10</b>	<b>1.44</b>

## **Risks Profits of farmers/clients of SKDRDP**

- Farmer with small landholding
- Limited scope for diversification
- Rain fed Farming
- Changes in Weather/climate and the impact on farming

## **Why weather risks given more concern than other crop risks**

- This scheme provides insurance coverage and financial support to the farmers in the event of failure of crops due to Adverse Weather Incidence and subsequent crop loss.
- WBCIS are as follows: Rainfall – Deficit Rainfall, Unseasonal Rainfall, Excess rainfall, Rainy days, Dry-spell, Dry days  
Relative Humidity Temperature – High temperature (heat), Low temperature (frost) Wind Speed A combination of the above Hailstorms and cloudburst Crops Covered The scheme covers major food crops such as cereals, millets & pulses, Oilseeds and commercial / horticultural crops. Crops are selected and notified by State Governments. Farmers Covered This scheme is available to all kinds of farmers, big or small; loanee or non-loanee;

## **Challenges in WBCIS**

### **Technical problems:**

Geographic basis risk!

Area yield data are not collected for all crops and all regions

Insufficient time series of area yield data for a given region

Historical area yield data are not reliable

Continuous three drought years, the expected block yield will be very less

Current year area yield estimate is subject to manipulation

## **Implementation problems:**

- Limited reach: Less than 5 % of the total number of farmers.
- Compulsory coverage: The product is tied to the crop loans given by rural public sector banking system. The coverage is compulsory for the borrowers and not voluntary. In many cases farmers themselves do not know that they were covered.
- Lack of transparency: Claims are assessed by crop cutting (loss adjustment) experiments in which yield assessment is made in few farms and the results are supposed to represent a large geographical area, usually a block or Taluk. The experiment results are not available for public verification.
- Uniform premium: The premium rate is uniform for a crop across the whole country while the risk certainly is not uniform nationwide.
- Very late compensation: The claim settlement process takes a very long time- from six months to two years in some cases, thereby allowing all the bad consequences of the yield loss to occur before the compensation reaches the insured.
- Lack of viability: The claim to premium ratio was 4.17 in the kharif season of 2002 showing that this intervention is not viable. The recent data also indicates the same trend.
- Administrative cost: Administrative cost is very high very high as crop cutting method is used for loss assessment.
- Inequality of benefits: The premiums and claims were not “equitably” distributed across crops and states, favoring paddy, groundnut and wheat farmers from Gujarat, Maharashtra and Andhra Pradesh.
- Political interference: Political interference at times converts this intervention into an instrument of popular politics, as it is used as a sop.



## **Coping efforts**

- The conventional coping efforts include shifting sowing season, changing crops/ varieties and diversifying to tree crops, livestock and off farm works.
- But these coping mechanisms are not sufficient and are not available to all the affected farmers
- Loss of livelihoods and migration

## **Overview of DHAN activities on crop insurance**

- Currently working with around 180000 farming families as part of Tank-fed Agriculture and Rainfed Farming programs
- Risk management is an integral part in development of farming livelihoods
- Has been taking up insurance related interventions since 1997

## **Crop insurance initiatives of DHAN Foundation**

- Has been taking up crop insurance related interventions since 2005
- Insurance will be offered along with other physical, biological and diversification risk management measures
- Build upon farmers' own practice

## **Role of crop insurance products**

- Protects farmer from loss and hence income from draining and
- Facilitates higher investments in farming
- Crop insurance as an effective CCA measure in combination with other physical, biological and diversification risk management measures

- Physical: Bunding, Silt application
- Biological: Quality seeds, Seed treatment
- Instrumental in enhancing the livelihoods of farming households

### **Crop insurance products implemented by DHAN**

<b>S.No</b>	<b>Period</b>	<b>Insurance product</b>	<b>Crops</b>	<b>No. of Locations</b>	<b>Remarks</b>
1	2004 to 2006	Deficit rainfall insurance	Groundnut and Cotton	2	With private insurer; joint design; shifted to mutual insurance
2	2005 & 2006	Mutual pest insurance	Green gram	1	Pilot scale; discontinued
3	2006 to till now	Mutual crop loss indemnity insurance	Groundnut	2	Backup guarantee by Achmea Re
4	2009 to 2013	Tailormade rainfall insurance	Pulses, minor millets, paddy, chillies, cotton	12	With AIC Backup

### **Crop insurance products implemented by DHAN**

<b>Period</b>	<b>Insurance product</b>	<b>Crops</b>	<b>No. of Locations</b>	<b>Remarks</b>
2016	Mutual Rainfall Insurance	Pulses, minor millets, paddy, chillies, cotton	4	Mutual program with back up guarantee with Achmea Re
	Mutual crop loss indemnity insurance	Groundnut	2	Backup guarantee by Achmea Re

## **Shifting to Mutual Crop Insurance**

- Mutual crop insurance is a ‘process based’ insurance mechanism, built on time tested mutuality practice in the farming community
- It is designed and managed jointly by the farmers from the insured farming community and insurance companies
- Insurance companies were not able to meet the location specific needs through customized policies on a micro scale
- An exclusive product for pest problem
  - Difference in crop practices across the locations and so the risk
  - Small unit size
- To meet the location specific needs
- Facilitating local communities in the design, implementation and decision making thereby increasing their ownership and awareness
- Mutuality concept was in harmony with our concept of community owned organisations

## **Rainfall indexed Mutual Insurance Product features**

- Crop : Maize
- Contribution amount : Rs.500 per acre
- Risk period : Sep 25, 2016 – Dec 31, 2016

### **Benefits:**

- The benefits of Rs.3000 per acre would be paid when the rainfall is less than 100mm during the risk period of Sep 25 to Nov 25, 2016.

- The benefits of Rs.2000 per acre would be paid when there is no rainfall for consecutive 20 days during the period of Sep 15 to Oct 15, 2016.
- The benefits of Rs.4000 per acre would be paid when there is excess of 100 mm rainfall in 3 consecutive days during the period of Nov 16 to Nov 31, 2016.

### **Challenges in rainfall indexed crop insurance**

- Basis risks: A situation where the benefit triggers does not match with the actual loss
  - Spatial basis risk: Variation in rainfall between the crop fields and the reference weather station
  - Temporal basis risk: arises due to difference in crop period and cover period. The sowing decisions are taken up in accordance with the receipt of rains in the beginning of cropping season. Because of changes in on set of rain the rainfall risk periods change and hence the product becomes less relevant.
  - Product basis risk: Designing an appropriate index that would minimize the variation from the actual loss.
- Capital requirements for establishing village rain gauges / weather stations
- Need for larger risk pool from across different agro climatic conditions
- Need to have risk sharing arrangement with larger players – insurers / reinsurers

### **Mutual Crop Loss Indemnity Insurance**

- Compensates the farmer the loss incurred by her/him (upto a pre specified limit)

- Comprehensive covering all types of crop risks like pest, disease, weather, sowing failures etc
- Premium: Rs.250 per acre for groundnut
- Sum Insured: Rs.5000 per acre
- Crop loss is measured from yield estimates of each field

### **Inspiration and Support for this initiative**

- DHAN Foundation was impressed with the experience of mutual crop insurance in Netherlands.
- The training and technical support given by Mutual Insurance Association of Netherlands (MIAN) and financial support and back up guarantee support given by Eureko Re were instrumental in initiating mutual crop insurance.

### **Crop insurance: Challenges**

- Lack of realisation of need for insurance among insurance providers
- Lack of knowledge on insurance among the farmers
- Lack of well designed and customized products
- Lack of effective insurance delivery mechanism
- Lack of state support for mutual initiatives

Supporting suitable Crop Insurance would serve as not only as effective climate change adaptation strategy, but also support for all the development interventions to bring about sustainable and balanced development

### **Valediction and Way Forward**

Shri M Kalyanasundaram, CEO, INAFI INDIA summed up the entire proceedings and brought out the policy leads that have emerged out of deliberations. The policy recommendations are:

Mr Desai, DGM, Syndicate Bank, Bangalore in his valedictory address narrated the development role being played by the SLBC in coordinating with bankers, Govt and other stakeholders and in the implementation of PMFBY. And he was very optimistic that the scheme would perform well in view of its inbuilt advantages provided that all stakeholders carry the scheme in all earnestness to take it to the targeted beneficiaries- farming community.

The conference came to an end with the vote of thanks proposed by Shri.M.Kalyanasundaram.

## About NABARD

National Bank for Agricultural and Rural Development, established through an Act of Parliament in the year July 1982 is the only Development Finance Bank dedicated exclusively for Agricultural and Rural development in the country. Its mission is to promote sustainable and equitable agriculture and rural prosperity through effective credit support, related services, institution development and other innovative initiatives. NABARD is globally recognised as pioneer for the largest micro finance programme namely SHG Bank Linkage Programme.

## About IDF Foundation

IDF is a social enterprise registered as a Trust in November 2001 and based in Bangalore. It works at grassroots level for empowerment of the underprivileged sections of the society and does research on development issues in India. Its mission is to promote sustainable agriculture and natural resource management as means of livelihood improvement among rural poor through holistic approaches involving social mobilization, financial inclusion of the excluded sections and, promotion of prudent financial practices and sustainable livelihoods.

## About INAFI India

Inafi India (International Network of Alternative Financial Institutions - India) is a network of Development NGOs involved in enabling and supporting development programmes/livelihood interventions of the member organizations in India. Inafi India is affiliated to global network of Inafi and being country chapter in India, the network is working on the vision of Inafi for development with dignity for poor and enabling access to basic services including financial services. The collective outreach of members is more than 10 millions across the states. Inafi spearheads the SHG bank linkage and financial inclusion, advancing the microfinance sector, capacity building programmes for members and policy advocacy for pro-poor microfinance services are the twin mandate of the Inafi India.

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