ABSTRACT

Agriculture is backbone of Indian Economy. It contributes 14 % to Gross Domestic Product (GDP) & food to all Indians but the supplier of food to entire India (Farmer) is starved and deprived of Food, Shelter and Cloths and forced to attain the status of poor standard of living. Sometime failure of crop is forcing the farmer to choose the path of suicide due to intolerance and debt burden. The solution to the same was brought out by new Scheme launched by Government of India (GOI) called Pradhan Mantri Fasal Bima Yojana (PMFBY) and GOI allocated a fund of Rs. 5500 crore for effective implementation. Here, the farmers are given protection from failure of crop and other perils of farming assets and to mitigate the losses from unforeseen circumstances of climate change and other natural calamities. This scheme helps the farmer not only to sustain them in doing agricultural activities and also to go for alternative farming practices. The new crop insurance scheme is introduced with an objective 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 and also to stabilize the income of farmers to ensure their continuance in farming. It also encourages farmers to adopt innovative and modern agricultural practices & ensure flow of credit to the agriculture sector.

Keywords: Crop Insurance; NAIS; PMFBY; Unified Package Insurance Scheme (UPIS) Package; Challenges of PMFBY

INTRODUCTION

The Hon”ble Prime Minister of India, Shri Narendra Modi has launched a brand new crop insurance scheme on 13th January, 2016. This crop insurance scheme is called Pradhan Mantri Fasal Bima Yojana (PMFBY) which will be implemented in every state of India, with association with the respective State Governments with effect from kharif 2016. This crop insurance scheme will be administered under the Ministry of Agriculture and Farmers’ Welfare, Government of India.

The main motto of this new crop insurance 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.

Advantages To Farmers

✔ In case of any future uncertainties farmer is assured of make up the loss
✔ Trust on the nation and its scheme to take up the agriculture activity confident
Need not to migrate to urban and other metro centre’s
It ensures sustainability in Agriculture.
Farmers can avoid the forced sale of agricultural land to real estate owners.
Non-loanee farmers are also eligible.

Advantages To Banks

✓ In case failure of crops, claim on insurance scheme will be settled through bank
✓ No need of keeping apprehension while financing farmers for agricultural activities
✓ Lending to agriculture is a viable business proposition
✓ This insurance scheme is an important risk mitigant tool for the bankers
✓ It will not affect further disbursement to the farmers.
✓ By helping the non-loanee farmers for PMFBY scheme bankers can develop relationship with farmers and convert it into business.

OBJECTIVES OF PAPER

1. To Study and analyze problems of Indian farmers and solution for the same.
2. To ascertain the issues and challenges in Implementation of Pradhan Mantri Fasal Bima Yojana (PMFBY)
3. To Study and Analyze the Newly launched scheme Pradhan Mantri Fasal Bima Yojana (PMFBY)
4. To analyze the Benefits of Scheme Pradhan Mantri Fasal Bima Yojana (PMFBY) for Farmers and Bankers

Need Of Revamping Of Insurance Scheme

A major portion of Indian citizens, mostly in rural areas depends on agriculture and farming. So it is very necessary to strengthen their crop insurance scheme so as to prevent them incur heavy losses even if the crops gets damaged due to natural calamities and other unavoidable circumstances. There are several factors that result in poor production of crops in some regions.

Worst case scenario is that the entire crop gets damaged and the cultivators have to go through heavy losses. Most farmers take loans for buying agricultural seeds, fertilizers, irrigation facilities, pesticides and other agricultural machineries for cultivation of crops. But sometimes unavoidable natural disasters like draught, floods, fire, pest attack, etc. strike and destroy the crop yield.

Then farmers choose the path of suicide as they become unable to cope up with the burden of debt. There are an alarming number of farmer suicides in India, which is a burning issue, not only in India, but also throughout the world. As per reports of Home Ministry, reports of near about 3000 farmers’ suicide have been registered in India, in the last three years itself. So the Centre has planned to bring back a new crop insurance scheme called PMFBY in the country and rectify the loopholes, present in the existing National Crop Insurance Programme (NCIP).

In India many schemes are already launched but unfortunately all such schemes till date failed miserably, the details of the scheme as below (Table No 1).

<table>
<thead>
<tr>
<th>Name of the scheme</th>
<th>Start Year</th>
<th>End Year</th>
<th>Salient Features</th>
<th>Reason of Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Crop Insurance Scheme (CCIS)</td>
<td>NA</td>
<td>1997</td>
<td>If the actual yield in any area covered by the scheme fell short of the guaranteed yield, the</td>
<td>Out of all the Al-India claims of Rs 1623 crores, Gujarat alone</td>
</tr>
</tbody>
</table>
farmers were entitled to an indemnity on compensation to the extent of the shortfall in yield received Rs.792 crores for single crop, Groundnut

Experimental crop insurance scheme 1997-98 1997-98 Small and Marginal farmers growing specified crops in selected districts covered. The premium was subsidized The premium collected was about Rs.3.00 crores and the claims amounted to Rs. 40 crores

Farm Income Insurance scheme 2003-04 2003-04 Targeted yield and prices through a single insurance policy so that the insured farmer could get a guaranteed income Change in Government

National Agricultural Insurance scheme 1999 2012 Cover all food crops, oilseeds, Horticultural crops Some of the crops not covered. No uniform insurance premium and costly

National Crop Insurance Scheme (NCIP) 2012 2015 NAIS, WBCIS and Coconut Palm Insurance High Premium and difficulties in implementing the same

P K Mishra Comitee on crop insurance also submitted excellent report to government and some of the recommendations are also incorporated in newly launched PMFBY.

The new Crop Insurance Scheme is in line with One Nation – One Scheme theme. It incorporates the best features of all previous schemes and at the same time, all previous shortcomings/weaknesses have been removed. (Table No.2)

<table>
<thead>
<tr>
<th>No</th>
<th>Feature</th>
<th>NAIS [1999]</th>
<th>MNAIS [2010]</th>
<th>PM Crop Insurance Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Premium rate</td>
<td>Low</td>
<td>High</td>
<td>Lower than even NAIS (Govt to contribute 5 times that of farmer)</td>
</tr>
<tr>
<td>2</td>
<td>One Season – One Premium</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Insurance Amount cover</td>
<td>Full</td>
<td>Capped</td>
<td>Full</td>
</tr>
<tr>
<td>4</td>
<td>On Account Payment</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Localized Risk coverage</td>
<td>No</td>
<td>Hail storm Land slide</td>
<td>Hail storm Land slide Inundation</td>
</tr>
<tr>
<td>6</td>
<td>Post Harvest Losses coverage</td>
<td>No</td>
<td>Coastal areas - for cyclonic rain</td>
<td>All India – for cyclonic + unseasonal rain</td>
</tr>
<tr>
<td>7</td>
<td>Prevented Sowing coverage</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>Use of Technology (for quicker settlement of claims)</td>
<td>No</td>
<td>Intended</td>
<td>Mandatory</td>
</tr>
<tr>
<td>9</td>
<td>Awareness</td>
<td>No</td>
<td>No</td>
<td>Yes (target to double coverage to 50%)</td>
</tr>
</tbody>
</table>

In the year of 1999, an insurance scheme was launched which was named National Agriculture Insurance Scheme (NAIS). But it had some drawbacks due to which it never became a success and could not stand efficient for the insurance purposes of the farmers. It was implemented only in 14 states of India, which are most affected by weather calamities. States like Madhya Pradesh, Uttar
Pradesh, Rajasthan, etc. were in the list of the affected states. As per NAIS, the insurance premium rates were 1.5 % and up to 3.5 % of the net sum assured for all food crops. These food crops include pulses, cereals, oilseeds, grains, etc. And actuarial premium rates were charged for commercial crops and horticulture crops.

Cotton was the most popular commercial crop at that time, which got largely affected by pest attacks. Later, the NIAS was restructured and modified as MNIAS which stands for Modified NIAS. But MNIAS was implemented in only 6 states of India and thus could not get success. The other failing factors of these past schemes were caps on the sum assured, slow claim process, fraud in the insurance system, etc. Also a major setback of this insurance plan was that those farmers who have taken loan for purchasing agriculture machineries, crop seeds, insecticides and pesticides, etc. were only given the insurance benefit.

So due to all those disadvantages of the earlier insurance scheme, the Govt. has planned for a new crop insurance scheme that will not provide insurance to all farmers from crop damage, but also become a financial support for them.

Under this insurance plan, the premium rate will be 2 % of the actual sum assured amount for Kharif crops and for the Rabi crops, it will be 1.5 % of the total sum assured. The sum assured amount is likely to be increased so as to provide a better insurance cover to the farmers.

For the commercial and horticulture crops, the premium rate will be 5 %. Apart from this, the Prime Minister has mentioned that the use of technology will be implemented into the scheme to make it a fast, user friendly, efficient and fraud free system. Better infrastructure will be built to provide irrigation facilities to every farmland of India and fight the drought conditions. More technologies for weather prediction is to be implemented so as to lower the levels of crop damage due to natural calamities. This new crop insurance plan will be functional from the next Kharif season of crop cultivation.

**Implementing Agencies**

- Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW)
- Ministry of Agriculture & Farmers Welfare (MOA&FW),
- Government of India (GOI)
- Concerned State in co-ordination with various other agencies; viz Financial Institutions like Commercial Banks, Co-operative Banks, Regional Rural Banks and their regulatory bodies
- DAC&FW has designated/empanelled Agriculture Insurance Company of India (AIC) and some private insurance companies

The Scheme shall be implemented on an ‘Area Approach basis’ i.e., Defined Areas For each notified crop for widespread calamities with the assumption that all the Insured farmers, in a Unit of Insurance, to be defined as Notified Area for a crop, Face similar risk exposures, incur to a large extent, identical cost of production per Hectares, earn comparable farm income per hectare, and experience similar extent of crop loss due to the operation of an insured peril, in the notified area. For Risks of localised calamities and Post-Harvest losses on account of defined peril, the Unit of Insurance for loss assessment shall be the affected insured field of the individual farmer.

**Risks to Be Covered & Exclusions**

**Risks**

Following risks leading to crop loss are to be covered under the scheme:-
Yield Losses (Standing Crops, On Notified Area Basis)- Comprehensive risk insurance is provided to cover yield losses due to non-preventable risks, such as

- Natural Fire and Lightning
- Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane, Tornado etc.
- Flood, Inundation and Landslide
- Drought, Dry spells
- Pests/ Diseases etc.

Prevented Sowing (On Notified Area Basis)- In cases where majority of the insured farmers of a notified area, having intent to sow/plant and incurred expenditure for the purpose, are prevented from sowing/planting the insured crop due to adverse weather conditions, shall be eligible for indemnity claims upto a maximum of 25% of the sum-insured.

Post-Harvest Losses (Individual Farm Basis)- Coverage is available up to a maximum period of 14 days from harvesting for those crops which are kept in “cut & spread” condition to dry in the field after harvesting, against specific perils of cyclone / cyclonic rains, unseasonal rains throughout the country.

Localised Calamities (Individual Farm Basis)- Loss/damage resulting from occurrence of identified localized risks i.e. hailstorm, landslide, and Inundation affecting isolated farms in the notified area

Exclusions

Risks and Losses arising out of following perils shall be excluded: - War & kindred perils, nuclear risks, riots, malicious damage, theft, act of enmity, grazed and/or destroyed by domestic and/or wild animals, In case of Post-Harvest losses the harvested crop bundled and heaped at a place before threshing, other preventable risks.

Sum Insured / Limit of Coverage

In case of Loanee farmers under Compulsory Component, the Sum Insured would be equal to Scale of Finance for that crop as fixed by District Level Technical Committee (DLTC) which may extend up to the value of the threshold yield of the insured crop at the option of insured farmer. Where value of the threshold yield is lower than the Scale of Finance, higher amount shall be the Sum Insured. Multiplying the Notional Threshold Yield with the Minimum Support Price (MSP) of the current year arrives at the value of sum insured. Wherever Current year’s MSP is not available, MSP of previous year shall be adopted. The crops for which, MSP is not declared, farm gate price established by the marketing department / board shall be adopted. Further, in case of Loanee farmers, the Insurance Charges payable by the farmers shall be financed by loan disbursing office of the Bank, and will be treated as additional component to the Scale of Finance for the purpose of obtaining loan.

Sharing Of Risk

Risk will be shared by Insurance Agency and the Government as follows:

The liability of the Insurance companies in case of catastrophic losses computed at the National level for an agricultural crop season shall be up to 350% of total premium collected (farmer share plus Govt. subsidy) or 35% of total Sum Insured (SI), of all the Insurance Companies combined, whichever is higher. The losses at the National level in a crop season beyond this ceiling shall be met by equal contribution (i.e. on 50:50 bases) from the Central Government and the concerned State Governments. Use of Mobile Phone Technology to improve Yield-data Quality & Timeliness Video/image capture of crop growth at various stages and transmission thereof with CCE Data on a real time basis utilizing mobile communication technology with GPS time Stamping, can improve data quality, / timeliness and support timely claim processing and Payments.
Use of Innovative Technology

It is advised use of available technology in the fields of remote sensing, aerial imagery, satellites etc. that can help in acreage estimation, crop health / loss estimation, quicker yield estimation etc. with reduced manpower & infrastructure. With development of number of satellites with high resolution images orbiting the Earth, there have been great improvements in satellite imagery products. It has been reasonably proven the satellite imagery can help in demarcating the cropped areas into clusters on the basis of crop health.

The integrity of CCEs will be verified by use of GPRS enabled Mobile phones with cameras/smart phones. These phones will also help in addressing the problem of area discrepancy by capturing pictures of standing crops and will also help in quicker, accurate estimation of yields. Such technologies, after due consideration of pilot results by the Government shall be included in the Scheme.

Weather Based Crop Insurance Scheme (WBCIS)

The structure of farmer’s premium under WBCIS will be at par with the proposed PMFBY. Also, the Criteria of selection of Implementing Agency and area allocation will be same as PMFBY.

Unified Package Insurance Scheme (UPIS)

Introduction- Unified Package Insurance Scheme aims at providing financial protection to citizens associated in agriculture sector, thereby ensuring food security, crop diversification and enhancing growth and competitiveness of agriculture sector besides protecting farmers from financial risks.

The cover will be for one full year except for Crop Insurance (which will be bi-annual separately for Kharif and Rabi seasons) renewable from year to year. The scheme would be offered / administered through AIC & empanelled General Insurance Companies willing to offer the product on similar terms with necessary approvals and allocation of area on pilot basis.

Salient Features And Benefits

- The policy contains seven Sections.
- Crop Insurance is mandatory. However, farmers have to choose at least two other sections also to avail the applicable subsidy under crop insurance section.
- In case of crop insurance, applicable Farmers share of premium ranging between 1.5% to 5% based on their insured crops is payable by farmer
- In case Actuarial premium is more, the Government will provide subsidy equivalent to the difference between Actuarial premium and premium paid by farmer.
- The crop insurance is based on area approach whereas all other sections are on individual basis.

The Section – Wise Details of the Scheme Are As Under

<table>
<thead>
<tr>
<th>Section</th>
<th>Asset to be insured</th>
<th>Particulars</th>
<th>Special Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crop Insurance</td>
<td>PMFBY/WBCIS state can choose any of these two</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Building and content Insurance</td>
<td>The Company will indemnify the Insured</td>
<td>The Company shall not be liable in respect of:</td>
</tr>
<tr>
<td></td>
<td>(Fire and Allied Perils)</td>
<td>in respect of loss of or damage to the Contents/Buildings whilst contained in</td>
<td>a) Loss or damage by burglary and / or housebreaking or theft where any member of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the insured premises by:</td>
<td>the insured family is concerned as principal or accessory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Fire, Lighting, Explosion of gas in domestic appliances,</td>
<td>b) Loss of or damage to articles of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Bursting and overflowing of water</td>
<td></td>
</tr>
</tbody>
</table>
### Personal Accident Insurance

<table>
<thead>
<tr>
<th>Coverage as per Pradhan Mantri Suraksha Bima Yojana</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scheme will be a one year cover, renewable from year to year; Accident Insurance Scheme offering accidental death and disability cover for death or disability on account of an accident. All savings bank account holders in the age 18 to 70 years in participating banks will be entitled to join.</td>
</tr>
</tbody>
</table>

### Agriculture Pump set Insurance (Up to 10 Horse Power)

<table>
<thead>
<tr>
<th>The Insurance covers the Centrifugal pump sets (electrical and diesel) up to 10 Horsepower capacity which are used for agricultural purposes only.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCOPE</td>
</tr>
<tr>
<td>Fire &amp; lightning</td>
</tr>
<tr>
<td>Burglary (due to violent forcible entry provided the pump set is kept in a locked enclosure).</td>
</tr>
<tr>
<td>Mechanical / electrical</td>
</tr>
<tr>
<td>Riot, Strike, malicious damage</td>
</tr>
</tbody>
</table>

### Agricultural Tractors Insurance

| Covers the insured against loss or damage to the Agriculture Tractor by fire, explosion, self-ignition or lightning, burglary, housebreaking, theft, riot and strike, earthquake, fire and shock, inundation, typhoon, hurricane, storm, tempest, cyclone, hailstorm, frost, landslide/rockslides by accidental external means, malicious act, and terrorism activity while in transit by road, rail, and inland waterway. Also provides coverage against death or permanent disablement of the driver, due to an accident while driving the Tractor insured during any one policy period. |

| a) Normal wears & tears, gradual deterioration due to atmospheric condition or otherwise. |
| b) Willful act or gross negligence of the Insured or his representatives. |
| c) Faults existing at the time of commencement of insurance and known to the Insured or his representative. |
| d) Loss or damage for which the manufacturer or supplier of property is responsible either by law or under contract. |
| e) Cost of dismantling, transport to workshop and back as also cost of re-erection. |
Legal Liability to Third Parties: - Compensates for death/ bodily injury to third parties up to in the event of tractor being involved in an accident as per M.V. Act, 1988.

<table>
<thead>
<tr>
<th>STUDENT SAFETY INSURANCE</th>
<th>Schedule of Benefits (for Parent/ Student): SI per student</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Accidental death: Rs. 50000 (parent/student)</td>
</tr>
<tr>
<td></td>
<td>2. Permanent total disablement: Rs. 50000 (student)</td>
</tr>
<tr>
<td></td>
<td>3. Loss of one limb/Eye: Rs. 25000 (student)</td>
</tr>
<tr>
<td></td>
<td>4. Accidental hospitalization: Rs. 5000 (student)</td>
</tr>
<tr>
<td></td>
<td>In case of death of Father or Mother, the Claim amount to be converted into FD in the name of student till attainment of adulthood.</td>
</tr>
</tbody>
</table>

Schedule of Benefits (for Parent/ Student): SI per student:

1. Accidental death: Rs. 50000 (parent/student)
2. Permanent total disablement: Rs. 50000 (student)
3. Loss of one limb/Eye: Rs. 25000 (student)
4. Accidental hospitalization: Rs. 5000 (student)

In case of death of Father or Mother, the Claim amount to be converted into FD in the name of student till attainment of adulthood.

<table>
<thead>
<tr>
<th>LIFE INSURANCE</th>
<th>(As per Pradhan Mantri Jeevan JyotiBimaYojna (PMJJBY) Benefits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Death Cover : Rs. 2,00,000 per member</td>
</tr>
<tr>
<td></td>
<td>2. To be provided by Life Insurance Companies</td>
</tr>
<tr>
<td></td>
<td>PREMIUM: Premium to be deducted from member SB account. The premium is Rs.330/- plus Service Tax (if payable) irrespective of date of entry i.e. during enrollment period or after that date during the first year. Renewal premium is chargeable as per the rate decided from time to time on Annual Renewal dates.</td>
</tr>
</tbody>
</table>

Challenges Of PMFBY

- Many farmers of India are illiterate and they are unaware about insurance hence more thrust is to be given on publicity of the scheme
- India is very big country and having different agro climatic conditions hence implementation of the scheme is very big task
- Though the premium rate is reduced for Kharif and Rabi crops but the premium rate for horticultural crop is on higher side
- In unified Insurance Package scheme to avail subsidy farmer has to choose at least other two schemes which will increase farmer’s burden.
- Total Premium for all sections of Unified insurance package is more than Rs 5000/- hence it is not affordable for small and marginal farmers.
- The Farmers are Illiterate and they don’t know how to proceed for claim in case of loss
• There must be transparency in the calculating yield losses and it should be made public entire process of loss assessment for winning the confidence farmers and there must be one member from farmer for loss assessment.

• There is no any fixed time schedule for claim process to address slow claim process

• Present lacuna of fraudulent claim settlement is not addressed in PMFBY

• The government is Going to pay difference amount of premium which is very high if scheme is not properly implemented this will helpful for insurance companies to improve their business and profit instead of farmer’s Benefit.

CONCLUSION

Agriculture is biological industry and susceptible to various risk and owner of agriculture business suffers most. The natural calamity mainly drought, heavy rains, inundation and loss of farm assets decreases the income of farmer and ultimately farmer forced to last stage of life like suicide. Hence now GOI is come out with new scheme PMFBY which will take care of financial loss in extreme conditions and it is boon to the farmer. All the stakeholders and implementing agencies should involve whole heartedly in implementing and practicing the scheme successfully in such a way that the farmer should have the trust on the nation which increases the contribution from agriculture sector to GDP.

“At least once in your life you will need a doctor, Lawyer, An architect, but, every day three times a day you will need a farmer! Respect farmers……..Save Farmers”

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