A. Background of evaluation of Crop Insurance in India.

1. **Comprehensive Crop Insurance Scheme (CCIS)**

   To provide financial support to the farmers in the event of failure of crops as a result of natural calamities, a Comprehensive Crop Insurance Scheme (CCIS) was introduced in the country with effect from Kharif, 1985. The participation in the scheme was voluntary and the States were free to opt for the scheme. All farmers who availed crop loans from Commercial Banks, Regional Rural Banks and Cooperative Banks for growing wheat, paddy, millets (including maize), oilseeds and pulses were eligible for coverage under the scheme. CCIS remained under implementation till Kharif 1999.

2. **National Agricultural Insurance Scheme (NAIS):**

   To enlarge the coverage in terms of farmers (loanee and non-loanee both), more crops and more risks, ‘National Agricultural Insurance Scheme (NAIS) – (Rashtriya Krishi Bima Yojana)’ was introduced in Rabi 1999-2000 season in the country. The scheme was available to all the farmers – loanee and non-loanee both - irrespective of their size of holding.

   The NAIS was implemented by 25 States and 2 Union Territories. Under NAIS, during the last thirty three crop seasons (i.e. from Rabi 1999-2000 to Rabi 2015-16) about 2691 lakh farmers have been covered over an area of 3887 lakh hectares insuring a sum amounting to Rs. 461238 crore. The claims to the tune of about Rs. 50610 crore have been paid as against the premium of Rs. 14009 crore benefiting about 779 lakh farmers.

   Year-wise Plan allocation and expenditure during the XII Plan under NAIS is as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>BE/Allocation</th>
<th>R.E.</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>XII Plan tentative outlay Rs. 3400.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td>400.00</td>
<td>700.00</td>
<td>700.00</td>
</tr>
<tr>
<td>2013-14</td>
<td>1200.00</td>
<td>1600.00</td>
<td>1600.00</td>
</tr>
<tr>
<td>2014-15</td>
<td>1520.37</td>
<td>1637.23</td>
<td>1543.56</td>
</tr>
<tr>
<td>2015-16</td>
<td>*</td>
<td>*</td>
<td>1937.79</td>
</tr>
<tr>
<td>2016-17</td>
<td>*</td>
<td>*</td>
<td>3760.42</td>
</tr>
<tr>
<td>Total as on 26.09.2016</td>
<td></td>
<td></td>
<td>9541.77</td>
</tr>
</tbody>
</table>

   * Funds have been allocated jointly for all the existing Crop Insurance Schemes (viz. NAIS, MNAIS, WBCIS, CPIS and PMFBY).

   Scheme was demand driven and moreover, claims were based on the occurrence of natural calamities like drought, flood etc. The scheme was withdrawn after Rabi 2015-16.

3. **Pilot Modified National Agricultural Insurance Scheme (MNAIS):**

   To improve further and make the scheme easier & farmer friendly, a Joint Group was constituted by the Government to study the improvements required in the existing crop
Based on the recommendations of the Joint Group and views/comments of various stakeholders, Modified NAIS was approved for implementation on pilot basis in 50 districts during the remaining period of 11th Plan from Rabi 2010-11. The major improvements made in MNAIS were – actuarial premium with subsidy in premium ranging upto 75% to farmers; unit area of insurance reduced to village/village panchayat level; indemnity for prevented sowing/planting risk & for post harvest losses due to cyclone in coastal areas; on account payment up to 25% of likely claims as immediate relief; more proficient basis for calculation of threshold yield; minimum indemnity level of 80% and 90% etc. From Rabi 2013-14, it was launched as a full-fledged component scheme under the aegis of NCIP. Scheme was being implemented on actuarial basis but subsidy in premium upto 75% of Sum Insured was provided to farmers.

From its inception to Kharif 2015 to Rabi 2015-16, 276 lakh farmers have been covered over an area of 303 lakh hectares insuring a sum amounting to Rs. 62113 crore. Claims to the tune of about Rs. 4804 crore have become payable (of which majority claims have been settled) against the premium of about Rs. 5017 crore benefiting about 81 lakh farmers. Year-wise expenditure under the scheme is as under :-

(Rs. in crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>BE/Allocation</th>
<th>R.E.</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>XII Plan Outlay Rs. 480.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td>80.00</td>
<td>195.00</td>
<td>194.12</td>
</tr>
<tr>
<td>2013-14</td>
<td>250.00</td>
<td>251.02</td>
<td>251.02</td>
</tr>
<tr>
<td>2014-15</td>
<td>808.02</td>
<td>663.98</td>
<td>584.79</td>
</tr>
<tr>
<td>2015-16</td>
<td>*</td>
<td>*</td>
<td>413.89</td>
</tr>
<tr>
<td>2016-17</td>
<td>*</td>
<td>*</td>
<td>Nil</td>
</tr>
<tr>
<td>Total as on 26/09/2016</td>
<td></td>
<td></td>
<td>1443.82</td>
</tr>
</tbody>
</table>

* Funds have been allocated jointly for all the existing Crop Insurance Schemes (viz. NAIS, MNAIS, WBCIS, CPIS and PMFBY).

4. **Pilot Weather Based Crop Insurance Scheme (WBCIS):**

With the objective to bring more farmers under the fold of Crop Insurance, a Pilot Weather Based Crop Insurance Scheme (WBCIS) was launched in 20 States since Kharif/Rabi 2007. WBCIS aims to provide insurance protection to the farmers against adverse weather incidence, such as deficit and excess rainfall, high or low temperature, humidity etc. which are deemed to impact adversely the crop production. It has the advantage to settle the claims within shortest possible time. The WBCIS is based on actuarial rates of premium. During pilot period, premium actually charged from farmers was restricted to at par with NAIS. The Scheme is being implemented on full-fledged basis as component scheme of NCIP w.e.f. Rabi 2013-14 on actuarial premium however upto 50%
subsidy in premium (maximum premium for the farmers is restricted to 6%) are being provided to farmers.

From its inception till Kharif 2015 to Rabi 2015-16, about 724 lakh farmers have been covered over an area of 937 lakh hectares insuring a sum amounting to Rs. 124240 crore. Claims to the tune of about Rs. 9817 crore have become payable against the premium of about Rs. 12271 crore benefiting about 491 lakh farmers. Financial progress of the scheme is given as under:

<table>
<thead>
<tr>
<th>Year</th>
<th>BE/Allocation</th>
<th>R.E.</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>XII Plan Outlay 3930.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td>655.00</td>
<td>655.00</td>
<td>655.00</td>
</tr>
<tr>
<td>2013-14</td>
<td>700.00</td>
<td>700.00</td>
<td>700.00</td>
</tr>
<tr>
<td>2014-15</td>
<td>493.61</td>
<td>483.72</td>
<td>470.00</td>
</tr>
<tr>
<td>2015-16</td>
<td>*</td>
<td>*</td>
<td>630.79</td>
</tr>
<tr>
<td>2016-17</td>
<td>*</td>
<td>*</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Total as on 16/02/2016</strong></td>
<td></td>
<td></td>
<td><strong>2455.79</strong></td>
</tr>
</tbody>
</table>

* Funds have been allocated jointly for all the existing Crop Insurance Schemes (viz. NAIS, MNAIS, WBCIS, CPIS and PMFBY).

5. **Pilot Coconut Palm Insurance Scheme (CPIS):**

Coconut Palm Insurance Scheme (CPIS) was implemented on pilot basis from the year 2009-10 in the coconut growing areas of Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu and West Bengal. 50% of premium is contributed by Coconut Development Board (a Central Govt. agency); 25% by the concerned State Govt. and the remaining 25% by the farmer. The Insurance Company i.e. Agriculture Insurance Company of India (AIC) is implementing the scheme and responsible for making payment of all claims. The CPIS is administered by the Coconut Development Board (CDB). The Scheme is now being implemented as component of NCIP w.e.f. Rabi 2013-14. Financial progress is given in following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>BE/Allocation</th>
<th>R.E.</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>XII Plan Outlay Rs. 6.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td>1.00</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>2013-14</td>
<td>1.00</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>2014-15</td>
<td>1.00</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>2015-16</td>
<td>*</td>
<td>*</td>
<td>Nil</td>
</tr>
<tr>
<td>2016-17</td>
<td>*</td>
<td>*</td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Total as on 16.02.2016</strong></td>
<td></td>
<td></td>
<td><strong>1.00</strong></td>
</tr>
</tbody>
</table>

* Funds have been allocated jointly for all the existing Crop Insurance Schemes (viz. NAIS, MNAIS, WBCIS, CPIS and PMFBY).

6. **National Crop Insurance Programme (NCIP):**
Planning Commission while conveying its approval for continuation of on-going crop insurance schemes during the year 2012-13, advised DAC to re-structure the same based on the evaluation of erstwhile schemes. Accordingly, this Department had engaged an Independent Agency i.e. Agriculture Finance Corporation (AFC) to undertake the evaluation and impact assessment of crop insurance schemes. Based on the recommendations of evaluation study, experience of implementation and views of stakeholders, farming community, States etc., a restructured scheme in the name of “National Crop Insurance Programme (NCIP)” was been formulated by merging the erstwhile pilot MNAIS, WBCIS & CPIS with some improvements and approved for its implementation with effect from Rabi 2013-14 season. Hence, all the three schemes that were being implemented on pilot basis till then were launched as a full-fledged component under the umbrella scheme -NCIP with some improvements. NAIS was decided to be discontinued simultaneously. However, based on the representations from some States, NAIS was allowed to such States for implementation during Rabi 2013-14. Again, all State Governments/UT Administrations had been given the option to implement either NAIS or MNAIS for the year 2014-15 and 2015-16.

B. New Crop Insurance schemes – Pradhan Mantri Fasal Bima Yojana (PMFBY)

Keeping in view the representations from States/UTs especially on account of increase in premium rates & farmers’ share in premium, capping on premium rates and reduction in sum insured etc., NCIP/NAIS has recently been reviewed, and a new scheme namely, Pradhan Mantri Fasal Bima Yojana (PMFBY) has been approved in place of MNAIS/NAIS for implementation from Kharif 2016 season. Premium structure under Restructured WBCIS has also been rationalized and made at par with PMFBY. CPIS component will also be continued. In addition, a Unified Package Insurance Scheme (UPIS) covering other risks of farmers including life, accident like house, tractor, pump set, student safety etc. besides crop insurance has also been approved for implementation on pilot basis in selected 45 districts.

Brief features of new schemes are as under:-

**Pradhan Mantri Fasal Bima Yojana (PMFBY)**

- PMFBY will provide a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers and encourage them for adoption of innovative practices.

- The Scheme covers all Food & Oilseeds crops and Annual Commercial/Horticultural Crops.
• The scheme is compulsory for loanee farmers obtaining Crop Loan /KCC account for notified crops. However, it is voluntary for Other/non loanee farmers who have insurable interest in the insured crop(s).

• The scheme provisions have been simplified for easy understanding and the Maximum Premium payable by the farmers will be 2% for all Kharif Food & Oilseeds crops, 1.5% for Rabi Food & Oilseeds crops and 5% for Annual Commercial/Horticultural Crops.

• The difference between premium and the rate of Insurance charges payable by farmers shall be shared equally by the Centre and State.

• The scheme will be implemented by AIC and other empanelled private general insurance companies. Selection of Implementing Agency (IA) will be done by the concerned State Government through bidding on premium rates.

• The existing State Level Co-ordination Committee on Crop Insurance (SLCCCI), Sub-Committee to SLCCCI, District Level Monitoring Committee (DLMC) shall be responsible for proper management of the Scheme.

• The Scheme shall be implemented on an ‘Area Approach basis’. The unit of insurance shall be Village/Village Panchayat level for major crops and for other crops it may be a unit of size above the level of Village/Village Panchayat.

• In case majority of farmers in a notified area are prevented from sowing/planting the insured crops due to adverse weather conditions then insured farmers will be eligible for indemnity claims upto maximum of 25% of the sum-insured.

• Claims for wide spread calamities are being calculated on area approach. However losses due to localised perils (Hailstorm, landslide & inundation) and Post-Harvest losses due to specified perils, (Cyclone/Cyclonic rain & Unseasonal rains) shall be assessed at the affected insured field of the individual insured farmer.

• Three levels of Indemnity, viz., 70%, 80% and 90% corresponding to crop Risk in the areas shall be available for all crops.

• The Threshold Yield (TY) shall be the benchmark yield level at which Insurance protection shall be given to all the insured farmers in an Insurance Unit. Threshold Yield of the notified crop will be moving average of yield of last seven years excluding yield upto two notified calamity years multiplied by Indemnity level.

• In case of smaller States, the whole State shall be assigned to one Implementing agency (IA) (2-3 or more for comparatively big States). Selection of IA may be made for 3 years.

• The designated / empanelled companies participating in bidding have to bid the premium rates for all the crops notified / to be notified by the State Govt.

• Crop Cutting Experiments (CCE) shall be undertaken per unit area /per crop, on a sliding scale, as prescribed under the scheme outline and operational guidelines. Improved Technology like Remote sensing. Drone etc will be utilised for estimation of yield losses.
State governments should use Smart phone apps for video/image capturing CCEs process and transmission thereof with CCE data on a real time basis for timely, reliable and transparent estimation of yield data.

There will be a provision of on account claims in case of adverse seasonal conditions during crop season viz. floods, prolonged dry spells, severe drought, and unseasonal rains.

On account payment upto 25% of likely claims will be provided, if the expected yield during the season is likely to be less than 50% of normal yield.

The claim amount will be credited electronically to the Bank Account of individual Insured farmers.

Adequate publicity will be done in all the villages of the notified districts/ areas.

The cost of using technology etc. for conduct of CCEs etc will be shared between Central Government and State/U.T. Governments on 50:50 basis.

Restructured Weather Based Crop Insurance Scheme (WBCIS)

- The structure of farmer’s premium under WBCIS will be at par with PMFBY.
- The Criteria of selection of Implementing Agency and area allocation will be same as PMFBY.
- The other broad features will remain same as in the earlier scheme.

Coconut Palm Insurance Scheme (CPIS) – Continues as before.

Unified Package Insurance Scheme (UPIS)

- Unified Package Insurance Scheme will be implemented in selected 45 districts on pilot basis to provide financial protection & comprehensive risk coverage of crops, assets, life, and student safety to farmers.
- Pilot will include seven sections Viz., crop insurance (PMFBY/WBCIS), Loss of Life (Pradhan Mantri Jivan Jyoti Bima Yojana PMJJBY), Accidental Death & Disability (Pradhan Mantri Suraksha Bima Yojana-PMSBY), Student Safety, Household, Agriculture implements & Tractor.
- Crop Insurance will be compulsory. However, farmers can choose at least two sections from the remaining six sections.
- Farmers shall be able to get all requisite insurance products for farmers through one simple proposal/ application Form.
- Two flagship schemes of the Government viz Pradhan Mantri Suraksha Bima Yojana (PMSBY) & Pradhan Mantri Jivan Jyoti Bima Yojana (PMJJBY) have been included apart from insurance of assets.
- Pilot scheme will be implemented through a single window.
- Premium of PMSBY & PMJJBY is to be transferred to insurance companies which have tie up with the concerned banks.
- Processing of claims (other than Crop Insurance) shall be on the basis of individual claim report.

PMFBY/WBCIS has been implemented by 23 States during Kharif 2016 season (List Annexed). As provisional data available 315.31 lakh farmers have been covered under the Crop Insurance Schemes during Kharif 2016 season, which is higher than...
the Kharif 2015 which was a drought year. Despite the good monsoon year and delay in issue of notifications by some States due to migration to bidding system, coverage under the scheme has increased as shown from the provisional data available.

XXX XXX
Annexure

STATES THAT HAVE NOTIFIED PRADHAN MANTRI FASAL BIMA YOJANA & WEATHER BASED CROP INSURANCE SCHEME IN KHARIF 2016

1) Bihar
2) Gujarat
3) Madhya Pradesh
4) Jharkhand
5) Uttar Pradesh
6) Karnataka
7) Telangana
8) Andhra Pradesh
9) Maharashtra
10) Rajasthan
11) Chhattisgarh
12) Goa
13) Uttarakhand
14) Odisha
15) Himachal Pradesh
16) Assam
17) Tamil Nadu
18) Kerala
19) West Bengal
20) Meghalaya
21) Tripura
22) Haryana
23) Manipur