



**Revised Operational Guidelines
for implementation of
Technology Based Bangla Shasya Bima (BSB) Scheme
in West Bengal
2020.**

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Background:

West Bengal is principally an agrarian state having about 72 lakh farm families, most of whom belong to the small and marginal category. The cultivable area of the State is about 56 lakh hectares (LHa) out of which 52 LHa is under cultivation. The State Govt. is committed to the cause of the farmers' welfare and has been delivering crop insurance services to all categories of farmers, practically free of cost since 2011- 2012 Rabi Season, as a part of farmers' welfare measures.

During Kharif 2019 season, the Govt. of West Bengal launched the **Bangla Shasya Bima (BSB) Scheme**, the flagship Crop Insurance Scheme of the State, with an endeavour to alleviate the administrative and coverage limitations faced during implementation of hitherto Centrally Sponsored Crop Insurance schemes and to extend hassle free benefits of crop insurance to all farmers of the State. The Scheme was implemented during Kharif 2019 and Rabi 2019-20 seasons and there were considerable improvements in implementation of crop insurance which were noticeable in terms of flexibility in setting crop specific cut-off dates for enrolment of farmers, dedicated state crop insurance portal, substantial increase in the coverage of farmers and complete administrative control of the State towards effective and efficient implementation of the scheme.

However, a huge number of farmers had remained outside the purview of crop insurance. Moreover, assessment of claims based on Crop Cutting Experiments (CCEs) entailed delay in assessment and settlement of claims. This had necessitated technological interventions in the extant BSB scheme, by the way of application of remote sensing techniques and use of meteorological data, supplemented by field level observations. Hence, a **technology based** version of **Bangla Shasya Bima Scheme** was conceptualized to overcome the aforementioned shortcomings and was implemented during Kharif 2020, with Agriculture Insurance Company of India as the Implementing Agency. **The scheme leverages on satellite data, weather data and field level data generated by ground-truthing exercises and is expected to lead to a faster and more objective assessment and settlement of crop insurance claims.** In addition, the scheme has facilitated expansion in coverage of farmers to a large extent.

It has thus been decided to implement Technology Based Bangla Shasya Bima scheme in all districts of West Bengal for both Kharif and Rabi seasons. The necessary changes in the existing Operational Guidelines of BSB scheme are mentioned in the paragraphs below.

2. Objective of the Scheme:

The technology based **Bangla Shasya Bima** Scheme aims at supporting sustainable production in agriculture sector of the State of West Bengal by way of:

- a) Providing financial support to farmers suffering from crop loss/damage arising out of unforeseen events by fully subsidizing the insurance premium.
- b) Fast settlement of claims using remote sensing and weather data, supplemented by field data collection through objective and transparent ground-truthing process.
- c) Rationalization of the claims assessment procedure and actuarial pricing of the product.

3. Coverage of farmers:

3.1 All farmers including sharecroppers and tenant farmers growing the notified crops in the notified areas and having insurable interest are eligible for coverage. There will be no categorization of farmers as loanee or non-loanee farmers. The insurance coverage will be purely optional and available to all farmers who may like to insure their crops under BSB scheme.

3.2 The enrolment of farmers will be on individual basis and carried out by the implementing agency (IA) through their representatives. The enrolment can be done using BSB Mobile App developed by the State Govt or by using printed application forms.

3.3 All farmers covered under the scheme will be issued a “**Certificate of Insurance**” by the IA and the same will be reckoned as a proof of crop insurance and may be produced by the farmers to the Banks/ PACS, if required, for the purpose of sanction of crop loan.

3.4 The farmers will have to produce documentary evidence regarding their insurable interest for insurance in cultivated land (e.g. ownership/ tenancy/ cultivation rights) and crop proposed for insurance. The applicant farmer will have to furnish the following documents/ details:

- i. Name of notified Block/GP, Village and Mouza & JL No., Plot No. and crop wise cultivated **area (in acre)**.
- ii. **KYC documents**- copy of current Voter ID Card (EPIC).
- iii. **Bank Details:** Bank details of NEFT enabled bank account with a copy of pass book / Cancelled Cheque.
- iv. For land owner: Copy of Khatian / Parcha / Patta / Deed.
- v. **For Non-Owner Cultivator: Land Possession Certificate** for insurance coverage

of non-owner cultivators (share-croppers, tenant farmers, persons cultivating land recorded in the name of their relatives) may be issued by the concerned **Gram Panchayat** in the prescribed format (Format to be attached with the Notification). This document will be used only for crop insurance purpose for the notified season and not for any other purpose.

- vi. **Area Sown Certificate**, if required,(actually sown or for intended sowing) will be issued by the Assistant Director of Agriculture of the concerned Block or his representative or the Revenue Officer/ Revenue Inspector of L&LR Department. The area sown certificate can be given on line in BSB portal or off line in prescribed format.

3.5 The IA will reserve the right to repudiate any insurance proposal to avoid duplication of insurance against same piece of land.

3.6 Banks /PACS may not need to cover the farmers availing crop loan as there will not be any categorization of farmers as loanee or non-loanee. Enrolment of farmers are to be done by the implementing agency(IA). However, Banks/PACS can view the status of insurance coverage of the farmers availing crop loan in the BSB portal. For farmers not covered under BSB scheme the concerned Bank/PACS may prepare a list of farmers as per specified format (to be attached with Notification) and forward the same to the IA within the cut-off date for insurance coverage.

4. Preconditions for implementation of the Scheme:

4.1 A **State Level Committee** with **Chief Secretary as Chairman**, Addl. Chief Secretary of Agriculture Department as Convener, ACS/Principal Secretary/Secretary of Finance Department, Cooperation Department, Disaster Management Department and Agriculture Marketing Department, LRC, Adviser(Agri & Allied) to HCM, representatives from SLBC and NABARD will be formed. The Committee will decide the following:

- (i) Guidelines of the scheme.
- (ii) Budget for implementation of the scheme.
- (iii) Notification of crops: Kharif/Rabi.
- (iv) Fixation of unit for crop insurance (area based).
- (v) Fixation of the indemnity level.
- (vi) Seasonality discipline.
- (vii) Coverage of risks and exclusions etc.

4.2 The State Level Coordination Committee for Crop Insurance (SLCCCI) which is overseeing the present Crop Insurance scheme will be authorized to oversee the implementation of BSB scheme. The composition of SLCCCI may be strengthened

suitably from time to time to give representation to all the concerned participants including farmers in the implementation of the scheme.

4.3 The State Government will issue Notification for implementation of the scheme before every season which will imply the following conditions as binding on the State:

- a) State will make necessary budgetary provision in the budget, to release premium/premium subsidy based on fair estimates, at the beginning of the crop season;
- b) State should facilitate strengthening of weather station network.

4.4 **Selection of Implementing Agency:** The scheme shall be implemented by Agriculture Insurance Company of India Ltd (AICIL), with technology support from National Remote Sensing Centre – ISRO or as may be decided by the State Government.

5. Coverage of Risks and Exclusions

5.1 Prevented Sowing/ Failed Sowing:

- a) In cases where majority of the insured farmers of a notified area, having intent to sow/plant and have incurred expenditure for the purpose, are prevented from sowing/planting the insured crop due to adverse weather conditions, shall be eligible for indemnity claims up to a maximum of 25% of the sum-insured.
- b) This risk will be covered only for Aman Paddy during Kharif season and for Boro Paddy & Potato during Rabi season.
- c) Cut-off date for declaration of Prevented Sowing/Failed Sowing would be as per the notification.
- d) Trigger for evaluation of Prevented Sowing/Failed Sowing for each insurance unit (IU) would be:
 - i. Weather based term sheets to identify excessive rainfall and drought like scenario.
 - ii. Intimation by Assistant Director of Agriculture of the concerned block.
- e) On trigger for evaluation, an in-depth remote sensing-based analysis for the IU would be done. The actual Crop Sown Area in the current year would be compared with the normal area sown as per past crop maps available from the satellite imagery for the IU.
- f) Notified IUs will be eligible for “Prevented Sowing/ Failed Sowing” pay-out of 25% of the Sum Insured only if more than 75% of the normal Crop Sown Area for notified crop remained unsown due to occurrence of any of the above perils in that IU.
- g) After payment of compensation, the insurance coverage for the season and crop for that IU will cease, and no more compensation will be payable during the season.

5.2 Mid-Season Adversity:

- a) In cases where majority of the insured farmers of a notified area, are affected by widespread calamities such as drought, flood, cyclone, hailstorm etc. then mid-season adversity claims/ on account payment up to 50% of the sum insured shall be payable to indemnify the farmers.
- b) This risk will be covered only for Aman Paddy during Kharif season and for Boro Paddy & Potato during Rabi season.
- c) Mid-Season Adversity can be invoked after the cut-off date for prevented sowing/failed sowing up to the cut-off date as declared in the notification.
- d) Trigger for evaluation of Mid-Season Adversity for each IU would be as per intimation received from the concerned ADA.
- e) On trigger for evaluation, an in-depth remote sensing-based analysis for the IU would be done. If the area affected by mid season adversity is greater than 75% of the normal crop sown area, then mid-season adversity claims upto 50% of the sum insured would be payable and thereafter the insurance coverage for the season and crop for that IU will cease.

5.3 Crop - Sowing to Harvesting (Season End Claims):

- a) Comprehensive risk coverage will be provided to losses due to widespread non-preventable risks, viz. Drought, Dry spells, Flood, Inundation, Pests and Diseases, Landslides, Natural Fire and Lightning, Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane and Tornado.
- b) End of season claims will be assessed on the basis of CHF and will be settled within 45 days of harvesting or as may be provided in the Notification.

6. Notification

6.1 Meeting of SLCCCI should be convened at least three months before the start of cropping season for finalising various terms and conditions and calling of bids/ issuance of the bid notice to select insurance companies and carrying out implementation of the scheme during the bid/ risk period. The State Government will issue notification and circulate to all concerned agencies/ departments/ institutions at least one month in advance of the commencement of the crop season incorporating all the essential details about insured crops, areas, Scale of Finance, Sum Insured, threshold at insurance unit (IU) level for notified crops, Premium rates etc. along with seasonality discipline/ cut-off date for each activity.

6.2 **Notification of Crops and Unit Area:** The Scheme shall operate on the principle of “**Area Approach**” in the selected Defined Areas called **Insurance Unit (IU)**. The State Government will notify Crops and IUs covered during the season in accordance

with decision taken in the meeting of SLCCCI.

6.3 Notification of Indemnity Level: Three levels of Indemnity viz. 70%, 80% and 90% corresponding to high, moderate and low risk level of the areas shall be available for all crops. State Government in consultation with the SLCCCI shall fix the indemnity levels for notified crops.

6.4 Notification of Sum Insured: Sum Insured per hectare will be same and equal to the Scale of Finance as recommended by the District Level Technical Committee and notified by the State Government. No other calculation of Scale of Finance will be applicable. **Sum Insured for individual farmer is equal to the Scale of Finance per acre multiplied by area of the notified crop proposed by the farmer for insurance. ‘Area under cultivation’ shall always be expressed in ‘acre’.** The conversion factor from hectare to acre will be **1Ha = 2.47 acre.**

6.5 Notification of sowing and harvesting periods of notified crops: State Govt. will notify district-wise and crop-wise sowing/ planting and harvesting period of the notified crops.

6.6 Notification of Weather Stations: The State Government shall notify concerned weather stations and weather data provider/ expert agency whose report/ methodology would be used in assessing the extent of losses and computation of payment. In case of non-availability of weather data or data gaps, the data of adjoining weather stations or district IMD Stations may be used depending upon order of proximity.

6.7 Seasonality Discipline:

a) For Kharif season

Sl. No.	Activity	Cut Off Date for Seasonality Discipline	
		Aman Paddy	Aus Paddy, Maize & Jute
1.	Cut-off Date (COD) for enrolment	31 st August	30 th June
2.	Cut-off Date for Prevented sowing/failed sowing trigger	15 th September	NA
3.	Cut-off Date for Mid-Season Adversity trigger	30 th November	NA
4.	Payment of sowing failure claims	45 days from COD	NA
5.	Payment of mid-season adversity claims	45 days from COD	NA
6.	Payment of end of season claims	45 days from harvesting	45 days from harvesting

b) For Rabi season

Sl. No.	Activity	Wheat, Gram, Lentil, Mustard and Rabi Maize	Potato	Boro Paddy	Summer Maize, Summer Moong, Summer Til, Summer Groundnut and Sugarcane
1.	Cut-off Date for (COD) enrolment	31 st December	15 th December	31 st January	15 th March
2.	Cut-off Date for Prevented sowing/ failed sowing trigger	NA	31 st December	15 th February	NA
3.	Cut-off Date for Mid-Season Adversity trigger.	NA	15 th February	30 th April	NA
4.	Payment of sowing failure claims	NA	45 days from COD	45 days from COD	NA
5.	Payment of mid-season adversity claims	NA	45 days from COD	45 days from COD	NA
6.	Payment of end of season claims	45 days from harvest	45 days from harvest	45 days from harvest	45 days from harvest.

The above seasonality discipline is tentative and may be revised as per decision of the SLCCCI and notified by the State Govt.

7. Premium Rates and Premium Subsidy:

7.1 The **Actuarial Premium Rate (APR)** to be charged under BSB by implementing agency (IA) will be decided on the basis of e-bid or as may be decided by the State Govt.

7.2 Payment of Premium and Premium Subsidy:

The State Government will bear 100% of premium as subsidy for all crops except potato and sugarcane. In case of potato and sugarcane the farmer will be required to pay a premium upto 4.85% and the difference, if any, between the actuarial premium rate and the rate of insurance premium payable by farmers shall be the premium subsidy payable by the State Government. In case, of other crops, a token amount of Rs.1/- (rupee one only) may be charged by the IA from farmers' bank account for electronic updation of account details in the **BSB Portal** to facilitate timely settlement of claims to the concerned farmers.

7.3 Release of Premium:

State Government may release 40% of the total estimated premium subsidy of corresponding previous year's season to the selected insurance companies at the beginning of crop season on the basis of business projection to be submitted by the IA subject to fulfillment of General Financial Rules/ guidelines in the matter.

7.4 Adjustment of Premium due to Acreage discrepancy:

In case excess insurance coverage has been reported vis-à-vis actual area sown, leading to over-insurance, the discrepancy should be handled at farm level to protect the interest of farmers with genuine insurance coverage. All suitable measures should be taken by concerned stakeholders for de-duplication with the help of land records, revenue records and proposal/loan application of insured farmers. **Having access to digitized farm records on a GIS platform would be the ideal solution in such cases.** However, in the absence of a GIS based solution, the problem would be addressed as follows:

Wherever the 'acreage discrepancy' is likely, the acreage insured at IU level shall be compared with average sown area of past three years, and the difference would be treated as 'excess' insurance coverage after taking into account sown area data of the Revenue authority. Sum insured should be scaled down in the proportionate ratio that the average of three years' actual sown area bears to the insured acreage for the given crop. Claims shall be calculated on the basis of scaled down sum insured.

Extra premium shall be refunded back to the State Government for the portion of sum insured scaled down and the amount may be utilized for improvement of technology/ impact assessment etc.

8. Publicity and Awareness:

1. Arrangements for wide publicity in all the IUs of the notified districts/ areas should be made by the IA through electronic and print media, Krishi Mela, exhibitions, short films and documentaries to create awareness about benefits of the Scheme and the procedure of enrolment.
2. The IA in consultation with Agriculture Department shall work out appropriate Plan for adequate awareness and publicity prior to the start of coverage period. All the published material information should necessarily be uploaded on the crop insurance portal along with coverage/ frequency / duration date etc. The IA will prepare an

appropriate work plan in consultation with the DDA(Admn) of the districts/ADA of the blocks for adequate publicity and awareness generation.

3. The IA in collaboration with State Government shall chalk out plan for capacity building of the associated agents, Banks/PACS, Govt. officials etc. for effective implementation of the scheme and organize training workshops/ sensitization program for them.

9. Crop Insurance Portal and Data Entry:

9.1 The Bangla Shasya Bima portal of the State Government will be used for better administration and coordination amongst stakeholders, proper dissemination of information and transparency. Concerned IAs will be responsible for entry of all requisite information/ data in the crop insurance portal well in time as per notification issued by the State Government so that information may be available in digitized form to all stakeholders. The aforesaid portal will provide an integrated ecosystem to streamline the process, to automate administrative functions and bring transparency in implementation of the Crop Insurance programme in the State

9.2 The data on Crop Health Factor (CHF), weather data, ground truthing etc. should be uploaded by the IA in the BSB portal appropriately.

10. Monitoring and Supervision:

- a. The State Level Monitoring Committee (SLMC), District Level Monitoring Committee (DLMC) and Block Level Monitoring Committee (BLMC) will be responsible for monitoring and supervision of the scheme at the respective levels.
- b. State Government will periodically review the progress of the scheme to ensure benefits of crop insurance to the farmers on sound insurance principles and provide the best value for the premium.
- c. **Grievance redressal:**
 - i. The DDA(Admn) of the district will be the District Nodal Officer (DNO) and the ADA of the block will be the Block Nodal Officer (BNO) for grievance redressal.
 - ii. Grievances, if any, should be taken up for redressal at the Block level/ District level as the case may be, in the respective BLMC/ DLMC at the earliest possible time and latest within one month of filing. Grievances which cannot be

resolved by the BLMC should be referred to the DLMC along with resolution taken by the BLMC. The DLMC shall meet as and when required for redressal of grievances raised/ referred and the decision of the DLMC in such matters shall be treated as final.

iii. In case there is any issue/ grievance related to policy matters, the DLMC may refer the same to the SLMC along with their views/ recommendations. The decision of the SLMC in such matters will be final and binding upon all concerned.

d. The composition of the monitoring committees will be as follows:

A) State Level Monitoring Committee (SLMC):

- i) Additional Chief Secretary/ Principal Secretary/ Secretary, Agriculture Department **(Chairman)**
- ii) Director of Agriculture & Ex-Officio Secretary, Agriculture Department
- iii) Director, Bureau of Applied Economics & Statistics
- iv) Joint Secretary, Agriculture Department **(Convener)**
- v) Technical Expert in remote sensing technologies from the Department of Science & Technology and Biotechnology or any other Department under the State Govt, having such experts.
- vi) Addl. Director of Agriculture (Evaluation)
- vii) State Nodal Officer(SNO) (Crop Insurance)
- viii) Representative of Co-operation Department
- ix) State Level Officer of the Implementing Agency
- x) Convener of State Level Bankers Committee or his nominee
- xi) Chief General Manager, NABARD or his nominee
- xii) Farmers' representative (one)
- xiii) Any other person as desired by the Chairman.

B) District Level Monitoring Committee (DLMC):

- i) District Magistrate or Addl. District Magistrate **(Chairman)**
- ii) Karmadhyaksha Krishi, Sech-O-Samabaya Sthayee Samiti of the respective Zilla Parishad
- iii) Deputy Director of Agriculture (Admn.) **(Convener)**
- iv) Assistant Director, BAE & S
- v) Assistant Evaluation Officer (Evaluation Wing)
- vi) Representative of Co-operation Department
- vii) Representative of the Implementing Agency
- viii) Lead District Manager
- ix) District Development Manager, NABARD
- x) Farmers' representative(one)
- xi) Any other person as desired by the Chairman.

C) Block Level Monitoring Committee (BLMC):

- i) Block Development Officer (Chairman)
- ii) Karmadhyaksha Krishi, Sech-O-Samabaya Sthayee Samiti of the respective Panchayat Samiti.
- iii) Assistant Director of Agriculture (Block) (Convener)
- iv) Co-operative Inspector
- v) Representative of Implementing Insurance Agency
- vi) Representative of a local reputed NGO involved with Farmers' Welfare.
- vii) Farmers' representative(one)
- viii) Any other person as desired by the Chairman.

11. Claim Assessment:

11.1 Crop Health Factor (CHF) derived from the satellite data and rainfall / weather data will form the basis to arrive at the shortfall in expected yield, if any, for determination of season-end claims for each IU. The following parameters will be considered to arrive at the Crop Health Factor for each crop and IU:

- i. **Crop Greenness** as measured by NDVI (Normalized Difference Vegetation Index): Healthy vegetation (chlorophyll) reflects more Near-Infra-Red (NIR) and green light compared to other wavelengths and absorbs more red and blue light. NDVI quantifies vegetation by measuring the difference between near-infrared (which vegetation strongly reflects) and red light (which vegetation absorbs). More the NDVI, higher the greenness of the crop and higher the expected yield.
- ii. **Crop Wetness measured by LSWI** (Land Surface Water Index): LSWI indicates the total amount of liquid water in the vegetation and its soil background. The LSWI uses the Short Wave Infra-Red (SWIR) and the NIR regions of the electromagnetic spectrum. More the LSWI, higher the water availability to the crop. LSWI is also used to identify flood and inundation scenarios.
- iii. **Crop Structure measured by Backscatter Ratio (SAR):** In Synthetic Aperture Radar (SAR) imaging, microwave pulses are transmitted by an antenna towards the earth surface. The microwave energy scattered back to the satellite is measured. The SAR makes use of the radar principle to form an image by utilizing the time delay of the backscattered signals. Height and structure of the crop can be estimated by SAR.
- iv. **Fraction of Absorbed Photosynthetically Active Radiation(FAPAR):** The Fraction of Absorbed Photosynthetically Active Radiation (FAPAR, sometimes also noted FAPAR or FPAR) is the fraction of the incoming solar radiation in the Photosynthetically Active Radiation special region that is absorbed by a photosynthetic organism, typically describing the light absorption across an integrated plant canopy. The biophysical variable is directly related to the primary productivity of photosynthesis. FAPAR can also be used as an indicator of the state and evolution of the vegetation cover. Thus, higher the FAPAR,

higher is the radiation absorbed for photosynthesis and hence better is the crop health. FAPAR is reported to be a proxy of crop biomass.

- v. **Rain fall data** at block level measured by existing AWS/ Weather Stations/ ARGs for the current season will be used. For historical weather data, if sufficient AWS/ WS / ARG data is not available, satellite-based rainfall data from IMD would be used.
- vi. Qualitative Crop assessment based on comprehensive ground truthing exercise conducted by IA would also be used as an input for arriving at the crop health factor. A ground truthing protocol with the technological inputs of NRSC-ISRO would be developed and implemented by IA.
- vii. CHF will be calculated by applying **Entropy Weight Method (EWM)** on the parameter mentioned above for generation of weights. EWM is a commonly used weighting method that measures value dispersion in decision making. The greater the degree of dispersion, the greater the degree of differentiation and more information can be derived. Meanwhile, higher weight should be given to the index and vice versa. The biggest advantage of the EWM is the avoidance of the interference of human factors on the weight of indicators, thus enhancing the objectivity of the comprehensive evaluation results.

The following **fourteen (14) parameters** are to be considered for determining **CHF by Entropy Weight Method (EWM)** for every notified crop and IU:

EWM (Entropy Weight Method)

Parameter	SI No.	Sub-parameter
NDVI	1	Mean of Season Maximum NDVI
	2	CV of Season Maximum NDVI
	3	Mean of Integrated NDVI
	4	CV of Integrated NDVI
LSWI	5	Mean of Season Max LSWI
	6	CV of Maximum LSWI
	7	Mean of Integrated LSWI
	8	CV of Integrated LSWI
FAPAR	9	Mean of Season Max FAPAR
	10	CV of Maximum FAPAR
	11	Mean of Integrated FAPAR
	12	CV of Integrated FAPAR
Rainfall days	13	Rainfall Days Cumulative
Rainfall Dry days	14	Rainfall Dry Days Cumulative

- viii. **Threshold CHF** for each IU would be calculated by multiplying the average CHF for previous years by a suitable indemnity factor.
- ix. Claim amount would be computed using the below mentioned formula:

$$\text{Claim payable} = \frac{(\text{Threshold CHF} - \text{Current CHF}) \times \text{Sum Insured}}{\text{Threshold CHF}}$$

Example calculation for a particular IU & Crop:

CHF and Threshold CHF

Suppose: Crop Aman, Indemnity level 80%, Sum Insured Rs.50,000/-

Sum Insured per Hectare	Rs.50,000
Average CHF of previous years	1.23
Current CHF	0.7
Threshold CHF, considering IF @80%	= 1.23*0.8 = 0.984
Loss Cost Percentage	$(0.984-0.7)/(0.984) = 28.86\%$
Claim payable per Hectare	Rs. 14,430.89

11.2 Payment of Claim: The liability of payment of all claims shall be of the Implementing Agency. All claims should be settled by the IA within stipulated time limit failing which action will be taken as mentioned in para 11.4 below.

11.3 Refund of Cumulative surplus of premium: Any long-term cumulative surplus (calculated from scheme inception) of premium over claims in excess of 20 % for Kharif season and 40% for Rabi season (factoring in cost of capital, management expenses, reinsurance costs etc.) would be refunded by the IA to the Government of West Bengal.

11.4 Penalty in case of delay in claim settlement:

All admissible claims shall be mandatorily paid by the IA within the stipulated cut-off date failing which **penal interest @ 12% per annum** shall be imposed on admissible claims pending for disbursement beyond 30 days provided the State Government has already released the premium subsidy to the IA. The penal interest amount shall be credited in the technology fund for crop insurance.

12. Roles and Responsibilities of various agencies:

12.2 Government of West Bengal:

- i. To issue notification for implementing crop insurance before the start of every season.
- ii. To notify crops and insurance units for every season.
- iii. To notify district wise and crop wise normal sowing and harvesting calendar.
- iv. To provide crop wise, IU wise data of normal area sown.
- v. To notify cut-off dates for invoking provision of prevented sowing and Mid Term adversity.

- vi. To monitor and supervise the implementation of crop insurance scheme and issue necessary directives to all agencies / institutions/ Govt. departments/ committees involved in administration of the scheme as and when necessary.
- vii. To release advance premium and premium subsidy to the IA subject to availability of bills by the IA.

12.3 Implementing Agency(IA):

- i. The IA will implement the scheme in the area assigned to it to ensure coverage of all willing and eligible farmers under the technology based BSB scheme as per notification and work order issued by the State Govt.
- ii. The IA will liaise with State Govt. and agencies/ institutions/ committees involved in implementation of the technology based BSB Scheme.
- iii. Furnish the necessary details to the State Govt. as may be required as per the notification.
- iv. Ensure underwriting of responsibilities for processing and acceptance of risk.
- v. Undertake extensive efforts to create awareness and publicity at grass root level for enrolment under tech based BSB scheme. Also coordinate with the State Govt. and other agencies for awareness and publicity of the scheme.
- vi. Develop a dashboard which would provide the following information to the Government of West Bengal at insurance unit level on real time basis:
 - a. Enrolment
 - b. Premium
 - c. Ground Truthing summary
 - d. Crop health factor
 - e. Claims
- vii. IA will have the right to repudiate/ reduce claims, if during verification of land records and/ or assessment of claims, it is observed that:
 - a. Actual sown area was less than the actual insured area under a crop in an IU.
 - b. A different crop other than the insured one was sown in the plot.
 - c. Survey number insured was not actual crop growing survey no.
 - d. Area insured more than the total land holding of the farmer.
 - e. Multiple insurance for same crops on same land with multiple insures.
 - f. Sum Insured is mentioned more than the scale of finance for the insured crop.
- viii. The claim remittance shall be made directly into farmers' bank accounts as per the account details furnished by the farmers.

All other provisions of the Operational Guidelines of BSB Scheme notified vide No. 302-AG/O/Crop Ins/7C-06/2018 dated 15/02/2018 will be applicable *mutatis mutandis*.