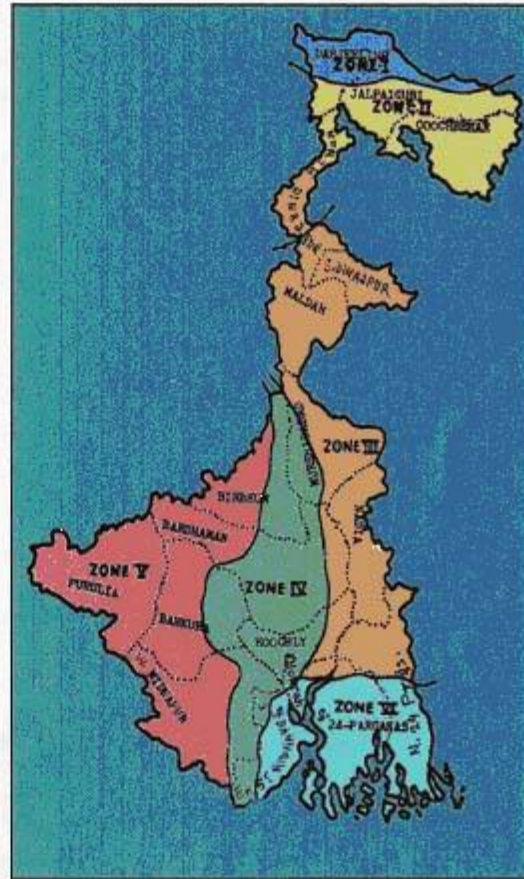


# AGROMETEOROLOGICAL ADVISORY BULLETIN FOR THE STATE OF WEST BENGAL AND A&N ISLANDS

*For the period from 05<sup>th</sup> January to 09<sup>th</sup> January '2019*

## AGROCLIMATIC REGIONS OF WEST BENGAL

-  HIMALAYAN HILLY REGION
-  TERAI AND TEESTA ALLUVIUM
-  GANGETIC ALLUVIUM
-  VINDHYA ALLUVIUM
-  RED LATERITIC
-  COASTAL SALINE



Issued on  
**Friday, 04<sup>th</sup> January '2019**

### **ISSUED BY**

**Regional Meteorological Centre, Alipore, Kolkata-27 in collaboration with State Agricultural Universities and state Agricultural Department.**

## Agroclimatic zones of the state

Sl. No.	Agroclimatic Zone	Districts	Agromet Field Unit (AMFU) Location
1	<b>Northern Hill Zone</b>	Darjeeling	Kalimpong
2	<b>Terai-Teesta Alluvial Zone</b>	Jalpaiguri, Alipurduar , Coochbehar and Uttar Dinajpur.	Pundibari
3	<b>Gangetic Alluvial Zone</b>	Murshidabad, Nadia, North 24 Parganas, Howrah, Hooghly and Burdwan	Kalyani
4	<b>Vindhyan Alluvial Zone</b>	Dakhin Dinajpur, Malda	Majhian
5	<b>Costal Saline Zone</b>	South 24 Parganas and Purba Midnapore	Kakdeep
6	<b>Undulating Red and Laterite Zone</b>	Purulia, Bankura , Paschim Midnapore , Jhargram and Birbhum	Kharagpur

## Met sub-divisions of the state

For Meteorological purposes, the state has been divided into two sub-divisions ( IMD Classification):

Gangetic West Bengal consists of Dakhin Dinajpur, Malda, Murshidabad , Nadia, South 24 Parganas, North 24 Parganas, Bankura, Purulia, Birbhum, Paschim Midnapore, Jhargram, Purba Midnapore, Kolkata , Burdwan.

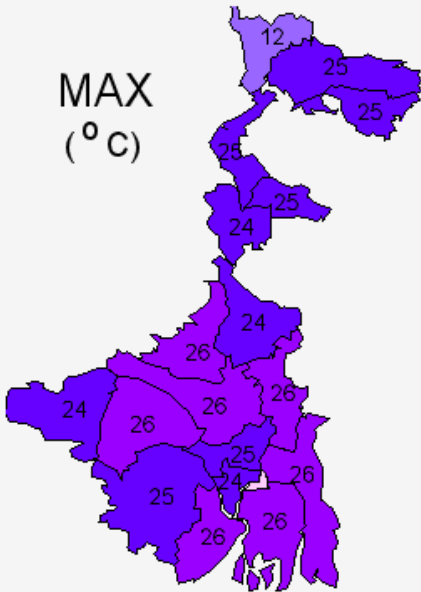
Sub-Himalayan West Bengal consists of Darjeeling, Coochbehar, Alipurduar, Jalpaiguri, Dakshin Dinajpur, Uttar Dinajpur.



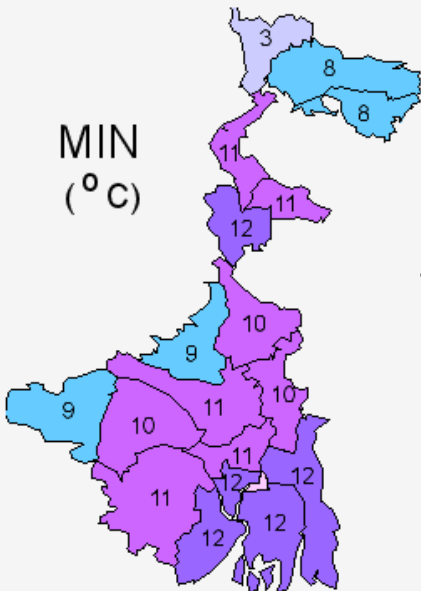
# DAY 2 FORECAST

Valid up to :Sunday 06th January 2019,0830 hrs IST

MAX  
(°C)

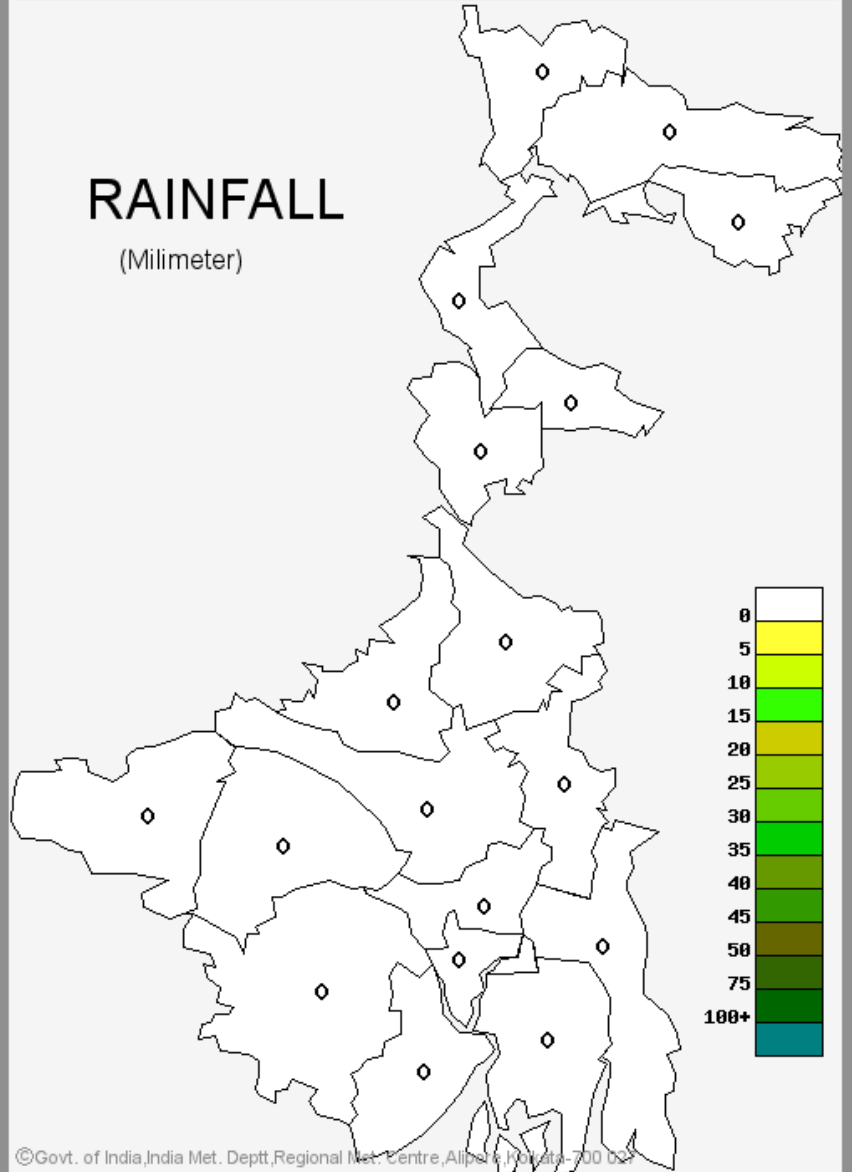


MIN  
(°C)



RAINFALL

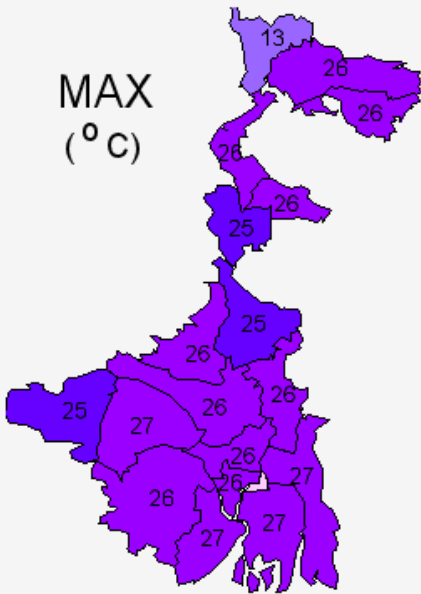
(Milimeter)



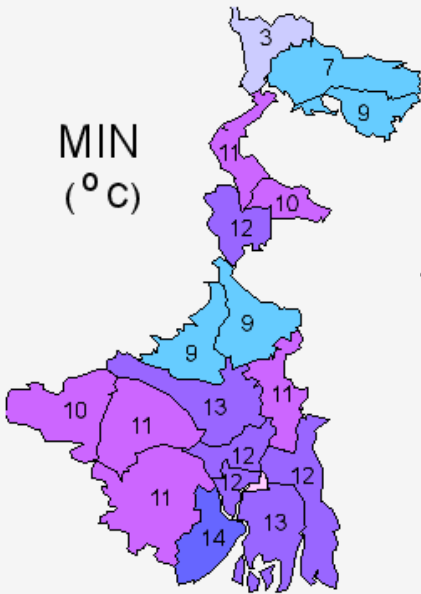
# DAY 3 FORECAST

Valid up to :Monday 07th January 2019,0830 hrs IST

MAX  
(°C)

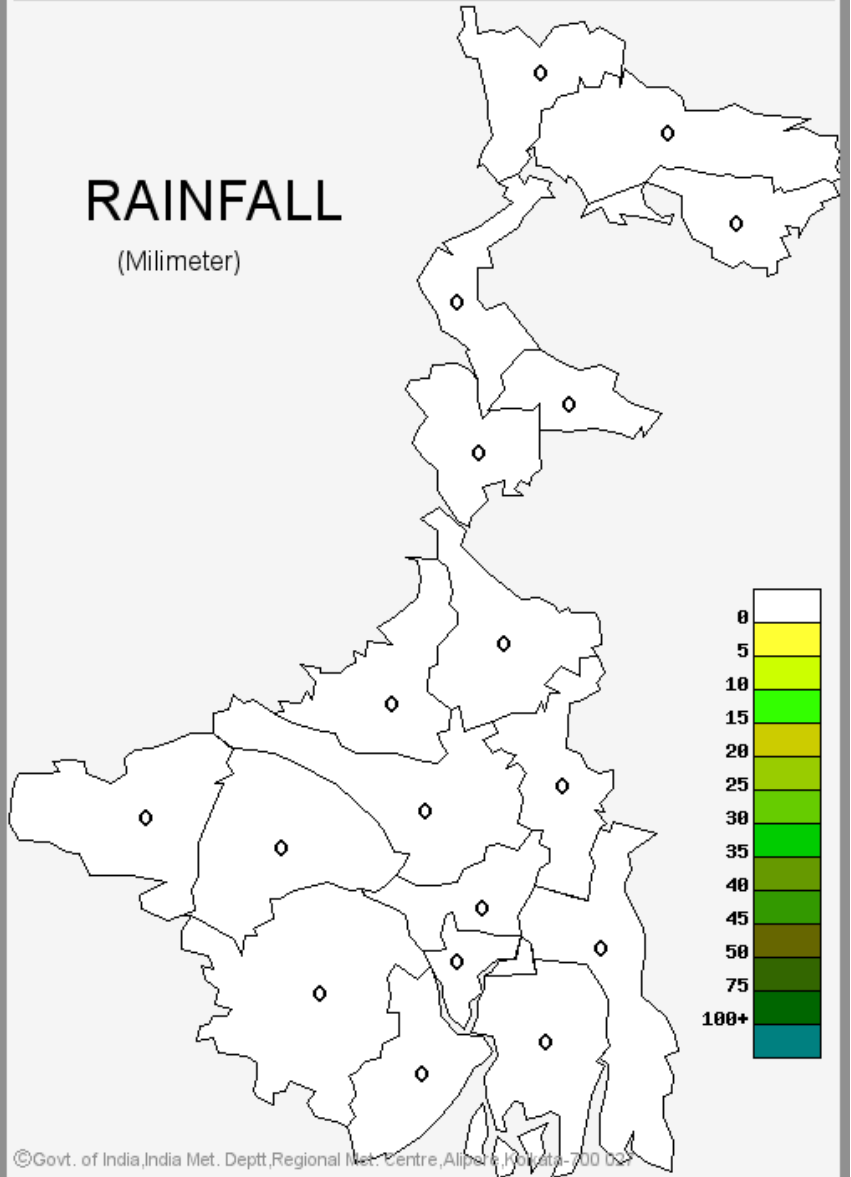


MIN  
(°C)



## RAINFALL

(Milimeter)

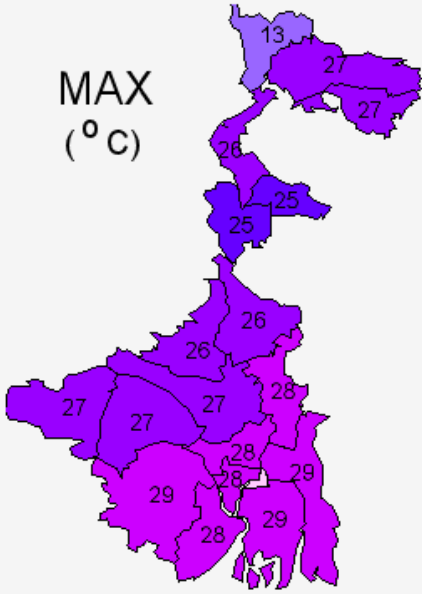




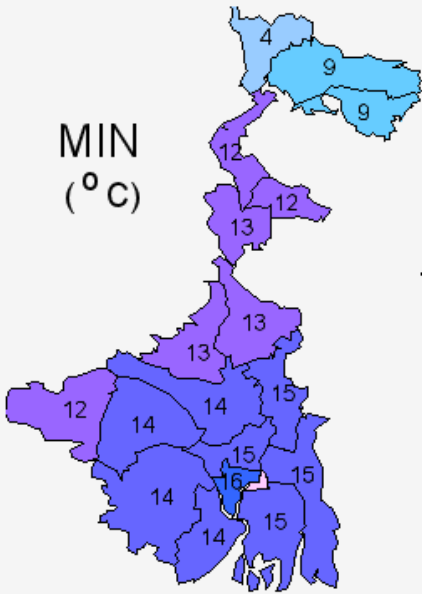
# DAY 5 FORECAST

Valid up to :Wednesday 09th January 2019,0830 hrs IST

MAX  
(°C)

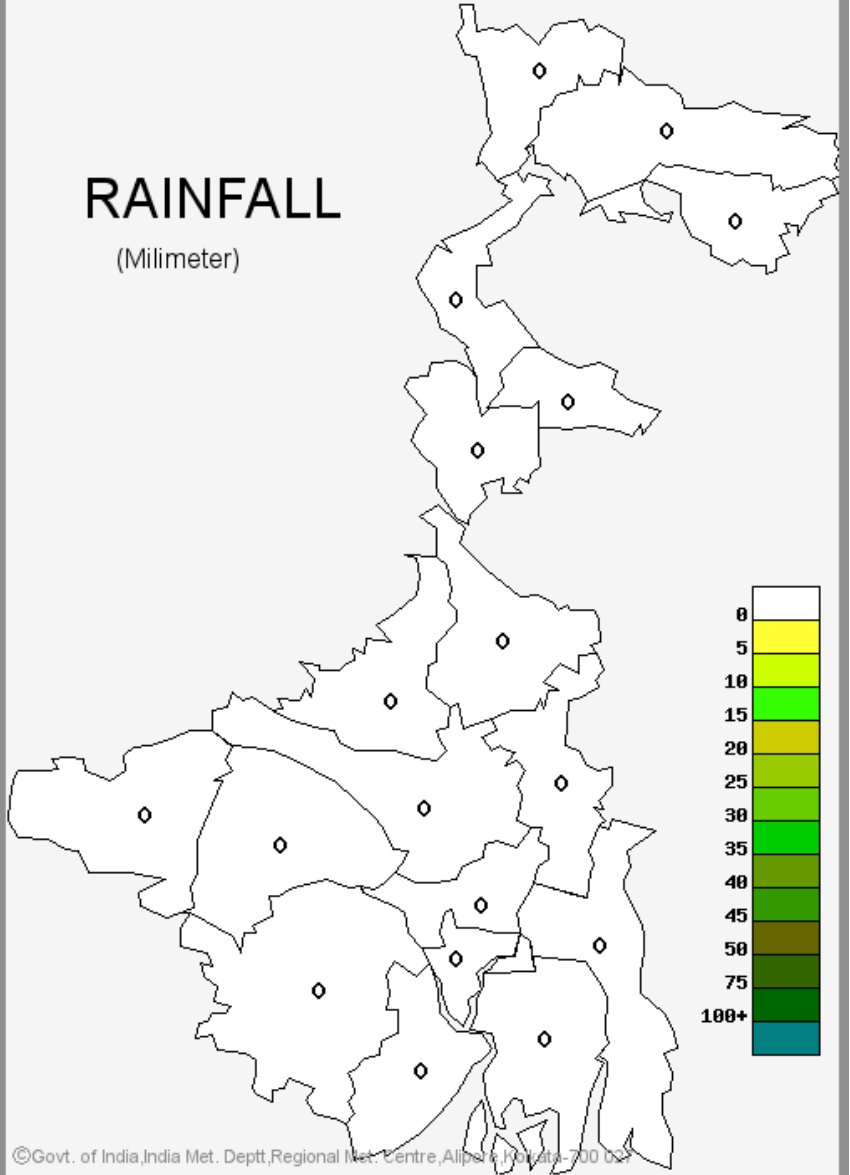


MIN  
(°C)



RAINFALL

(Millimeter)



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## Part I: Weather

*Districtwise significant Past Weather in different agroclimatic zones for the period 01/01/19 to 03/01/19*

*District level Weather Forecast for different agroclimatic zones for the period 05/01/19 to 09/01/19*

### West Bengal

#### Northern Hill Zone

##### DARJEELING

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	12-17	1-5	60-90
Wednesday	0.0			
Thursday	0.0			

##### DARJEELING

Rainfall	Possibilities of no rainfall have been forecasted for coming five days. In coming five days total rainfall of 0.0 mm is expected.
Cloud Cover	Possibilities of clear sky are expected for coming five days.
Max. Temp.	Maximum temperature is expected to be around 11 to 13°C.
Min. Temp.	Minimum temperature is expected to be around 2.0 to 4.0°C.
Max. RH	Maximum relative humidity is expected to be around 26- 54%.
Min. RH	Minimum relative humidity is expected to be around 15-29%.
Wind	Wind mainly will blow from south-westerly on 7 <sup>th</sup> Jan, southerly on 9 <sup>th</sup> Jan and rest of the days wind mainly will blow from south-easterly direction. In coming five days wind mainly will blow with a speed of 7.5- 8.7 km/hr is expected.

### Terai-Teesta Alluvial Zone

##### COOCH BEHAR

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	26-26	5-6	65-85
Wednesday	0.0			
Thursday	0.0			

##### COOCHBEHAR

- Clear Sky will remain from 05<sup>th</sup> to 09<sup>th</sup> January.
- No rainfall will occur from 05<sup>th</sup> to 09<sup>th</sup> January.
- Wind North easterly from 05<sup>th</sup> to 09<sup>th</sup> January, average speed of 7-11 km/hr. is expected.
- Maximum temperature is expected to be around 24-27°C and minimum temperature is expected to be 07-10°C
- Maximum and minimum relative humidity is expected to be 36-52% and 21-29% respectively.
- 

##### JALPAIGURI

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	26-27	6-7	55-85
Wednesday	0.0			
Thursday	0.0			

##### JALPAIGURI

- Clear Sky will remain from 05<sup>th</sup> to 09<sup>th</sup> January.
- No rainfall will occur from 05<sup>th</sup> to 09<sup>th</sup> January.
- Wind North easterly from 05<sup>th</sup> to 09<sup>th</sup> January, average speed of 6-7 km/hr. is expected.
- Maximum temperature is expected to be around 23-27°C and minimum temperature is expected to be 07-08°C
- Maximum and minimum relative humidity is expected to be 29-50% and 17-25% respectively.
-



**NORTH DINAJPUR**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	23-24	10-11	80-88
Wednesday	0.0			
Thursday	0.0			

**NORTH DINAJPUR**

- Clear Sky will remain from 05<sup>th</sup> to 09<sup>th</sup> January.
- No rainfall will occur from 05<sup>th</sup> to 09<sup>th</sup> January.
- Wind North easterly from 05<sup>th</sup> to 09<sup>th</sup> January, average speed of 6-9 km/hr. is expected.
- Maximum temperature is expected to be around 24-26°C and minimum temperature is expected to be 10-14°C
- Maximum and minimum relative humidity is expected to be 32-51% and 18-29% respectively.
- 

**Gangetic Alluvial Zone****BURDWAN**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-26	11-11	70-75
Wednesday	0.0			
Thursday	0.0			

**BURDWAN**

Clear sky is expected during next 5 days .  
No rainfall is expected during rest 5 days.  
Wind flow mainly from N, SE direction with 6.1- 1 km/hr. speed during next 5 days is expected.  
Maximum relative humidity is expected to be around 42-56% and minimum relative humidity is expected to be around 23% - 29%.  
Maximum temperature is expected to be around 26°C - 27°C and minimum temperature is expected to be around 11°C - 14°C .

**MURSHIDABAD**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	21-23	9-13	65-85
Wednesday	0.0			
Thursday	0.0			

**MURSHIDABAD**

Clear sky is expected during next 5 days .  
No rainfall is expected during rest 5 days.  
Wind flow mainly from N direction with 7.6- 12 km/hr. speed during next 5 days is expected.  
Maximum relative humidity is expected to be around 45%-56% and minimum relative humidity is expected to be around 24% - 30%.  
Maximum temperature is expected to be around 23°C - 24°C and minimum temperature is expected to be around 10°C - 11°C .

**NADIA**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	24-24	9-11	75-95
Wednesday	0.0			
Thursday	0.0			

**NADIA**

Clear sky is expected during next 5 days .  
No rainfall is expected during rest 5 days.  
Wind flow mainly from N , NE direction with 6.9- 11 km/hr. speed during next 5 days is expected.  
Maximum relative humidity is expected to be around 44-58% and minimum relative humidity is expected to be around 25% - 31%.  
Maximum temperature is expected to be around 25°C - 28°C and minimum temperature is expected to be around 11°C - 14°C .

**HOOGLHY**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-26	11-11	60-95
Wednesday	0.0			
Thursday	0.0			

**HOOGLHY**

Clear sky is expected during next 5 days .

No rainfall is expected during rest 5 days.

Wind flow mainly from N direction with 6.8- 12.7 km speed during next 5 days is expected.

Maximum relative humidity is expected to be around 41-51% and minimum relative humidity is expected to be around 23% - 29%.

Maximum temperature is expected to be around 26°C-28°C and minimum temperature is expected to be around 12°C-15 °C .

**HOWRAH**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	24-24	10-10	60-90
Wednesday	0.0			
Thursday	0.0			

**HOWRAH**

Clear sky is expected during next 5 days .

No rainfall is expected during rest 5 days.

Wind flow mainly from N direction with 6.1- 12.5 km speed during next 5 days is expected.

Maximum relative humidity is expected to be around 44-56% and minimum relative humidity is expected to be around 25% - 29%.

Maximum temperature is expected to be around 25°C-28°C and minimum temperature is expected to be around 12°C-15 °C.

**NORTH 24 PGS**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-27	11-13	60-70
Wednesday	0.0			
Thursday	0.0			

**NORTH 24 PGS**

Clear sky is expected during next 5 days .

No rainfall is expected during rest 5 days.

Wind flow mainly from N, NE,E direction with 8-14.2 km/hr. speed during next 5 days is expected.

Maximum relative humidity is expected to be around 43-54% and minimum relative humidity is expected to be around 23% - 28%.

Maximum temperature is expected to be around 26°C-28°C and minimum temperature is expected to be around 12°C-15 °C

**Vindhyan Alluvial Zone**

**DAKSHIN DINAJPUR**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-25	8-9	35-80
Wednesday	0.0			
Thursday	0.0			

**DAKSHIN DINAJPUR**

- Possibility of clear sky on 5<sup>th</sup> & 7<sup>th</sup> January and mainly clear sky on 6<sup>th</sup>, 8<sup>th</sup> & 9<sup>th</sup> January.
- There seems to be possibility of no rainfall on 5<sup>th</sup> January to 9<sup>th</sup> January.
- Wind from Northerly, North-easterly & South-easterly direction with an average speed of 6.5-12.7 Km/hr. is expected.
- Maximum temperature is expected to be around 25.0-27.0°C and minimum temperature is expected to be 10.0-13.0°C.
- Maximum and minimum relative humidity is expected to be 43-53% and 25-31% respectively.
- 

**MALDA**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	24-26	12-12	65-75
Wednesday	0.0			
Thursday	0.0			

**MALDA**

- Possibility of clear sky on 5<sup>th</sup> & 7<sup>th</sup> January and mainly clear sky on 6<sup>th</sup>, 8<sup>th</sup> & 9<sup>th</sup> January.
- There seems to be possibility of no rainfall on 5<sup>th</sup> January to 9<sup>th</sup> January.
- Wind from North-easterly, North-westerly, South-easterly & Northerly direction with an average speed of 6.6-11.0 Km/hr. is expected.
- Maximum temperature is expected to be around 24.0-27.0°C and minimum temperature is expected to be 11.0-16.0°C.
- Maximum and minimum relative humidity is expected to be 38-54% and 22-29% respectively.
- 

**Coastal Saline Zone****PURBA MIDNAPUR**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	23-27	8-13	60-90
Wednesday	0.0			
Thursday	0.0			

**PURBA MIDNAPUR****SOUTH 24-PGS**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-27	10-13	45-90
Wednesday	0.0			
Thursday	0.0			

**SOUTH 24-PGS****Undulating Red and Laterite Zone****PASCHIM MIDNAPORE**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	24-25	10-10	35-80
Wednesday	0.0			
Thursday	0.0			

**PASCHIM MIDNAPORE**

- No rainfall for the coming five days and clear sky will be present for the same.
- Predominant wind direction will be Northwesterly. Wind with a speed of 6.7-10.3 km per hour will blow for coming five days.
- Relative humidity maximum will be 48-52 % and minimum will be 26-27%
- Maximum temperature will be 24-25°C and minimum will be 10-12°C.
-

**BANKURA**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-26	10-10	60-75
Wednesday	0.0			
Thursday	0.0			

**BANKURA**

- No rainfall for the coming five days and clear sky will be present for the same.
- Predominant wind direction will be Northwesterly. Wind with a speed of 6.2-10.4km per hour will blow for coming five days.
- Relative humidity maximum will be 49-54 % and minimum will be 25-26%
- Maximum temperature will be 24-25°C and minimum will be 10-11°C.
- 

**PURULIA**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	23-24	7-8	25-80
Wednesday	0.0			
Thursday	0.0			

**PURULIA**

- No rainfall for the coming five days and clear sky will be present for the same.
- Predominant wind direction will be Northwesterly. Wind with a speed of 5.3-8.4 km per hour will blow for coming five days.
- Relative humidity maximum will be 48-54% and minimum will be 22-23%
- Maximum temperature will be 23-24°C and minimum will be 7-9°C.
- 

**BIRBHUM**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	25-26	8-8	65-85
Wednesday	0.0			
Thursday	0.0			

**BIRBHUM**

- No rainfall for the coming five days and clear sky will be present for the same.
- Predominant wind direction will be Northwesterly. Wind with a speed of 7.5-11.3 km per hour will blow for coming five days.
- Relative humidity maximum will be 48-55 % and minimum will be 26-29%
- Maximum temperature will be 25-26°C and minimum will be 8°C.
- 

**Andaman & Nicobar Islands****ANDAMAN**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	28-31	18-25	65-95
Wednesday	0.5			
Thursday	0.0			

**NORTH MIDDLE ANDAMAN**

Partly cloudy weather with light to moderate rainfall is likely to occur during next five days. In North and Middle Andaman 39 mm of rainfall is expected during this period. The maximum temperature in North and Middle Andaman will be 30.0 to 31.0 °C with minimum temperature of 22 to 23.0 °C, whereas the maximum and minimum relative humidity is expected to be in the range of 77 to 81 % and 69 to 74 % respectively in North and Middle Andaman. Wind speed of 11.0 to 27.9 km/h is expected from North Easterly direction.

**SOUTH ANDAMAN.**

- Partly cloudy weather with light to moderate rainfall is likely to occur during next five days. In South Andaman 42.0 mm of rainfall is expected during this period. The maximum temperature in South Andaman will be 30.0 to 31.0 °C with minimum temperature of 22 to 24 °C, whereas the maximum and minimum relative humidity is expected to be in the range of 78 to 81 %, and 67 to 74 % respectively in South Andaman. Wind speed of 11.0 to 27.5 km/h is expected from North Easterly direction.

**NICOBAR**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Tuesday	0.0	29-32	20-24	65-95
Wednesday	0.0			
Thursday	0.0			

**NICOBAR**

- Partly cloudy weather with light to moderate rainfall is likely to occur during next five days. In Nicobar Islands 61.0 mm of rainfall is expected during this period. The maximum temperature will be 30.0 to 31.0 °C with minimum temperature of 27 to 28 °C, whereas the maximum and minimum relative humidity is expected to be 74 to 82 %, and 69 to 74 %, respectively in Nicobar Islands. Wind speed of 8.1 to 26.5 km/h is expected from North Easterly direction.

## *Part II: Agroclimatic zonewise Agricultural/Agro meteorological Advisories*

### West Bengal

#### Northern Hill Zone

MAJOR CROPS	STAGE	PEST & DISEASES	ADVISORY
General	-	-	In coming five days no rainfall has been forecasted so, irrigate the crops as per the requirement. Agricultural vigour is in moderate condition in Darjeeling district according to the Normalized Difference Vegetation Index (NDVI) map from 24 <sup>th</sup> Dec to 30 <sup>th</sup> Dec, 2018.
Large cardamom	Vegetative Stage	-	Weeding should be done followed by light irrigation. Use leaf mold at base of clump for moisture conservation.
Mandarin Orange	Harvesting and Non Bearing-vegetative stage	-	Harvesting of fruits should be completed. Pruning of dried and overcrowded branches then spray copper oxychloride 2gm /lit of water with wettable sulphur 0.2%. Irrigation should be provided as per the requirement as no rainfall has been forecasted for coming five days. Manuring of the plants should be done @ 40 kg FYM/ plant and mulching also provided.
Ginger	Harvesting Stage	-	Harvesting of ginger rhizome should be done and



			stored in cool and dry places for seed.
<b>Turmeric</b>	Harvesting Stage	-	Harvesting of turmeric rhizome should be done and stored in cool and dry places for seed.
<b>Rice</b>	Harvesting Stage	-	If the crop is matured than harvest the crop as early as possible.
<b>Cole Crop (Cauliflower, Cabbage, etc)</b>	Vegetative stage	-	After weeding, irrigate the crop as per the requirement.
<b>Potato</b>	Seedling Stage	-	Irrigate the crops as per the requirement as no rainfall has been forecasted for coming five days.
<b>Garden Pea</b>	Flowering stage	-	Weeding should be done and irrigate the crops as per the requirement.
<b>Mustard</b>	Seedling stage	-	Light irrigation should be given if the soil has very low moisture level as no rainfall has been forecasted for coming five days.
<b>Animal Husbandry (Sheep and Goat)</b>	-	-	Sheep and goat are susceptible to Pneumonia and FMD in winter months. Take protective measure in winter months. Give vaccination against FMD. Don't allow sheep and goat to graze at early morning.

## Terai-Teesta Alluvial Zone

### Advisory

**General** According to NDVI map agriculture vigour is moderate, week no 52 dated 24.12.2018 to 30.12.2018.

### Agriculture and Horticulture

Main Crops	Stage	Pest & Diseases	Advisory
<b>Potato</b>	Sowing	Late blight	Treat the seeds before sowing in the solution of (Carbendazim 1g + Mancozeb 2g) per lit. of water by dipping for at least 30 minutes. Apply Chlorpyrifos at the time of Sowing in cut worm prone areas. Spray Mancozeb@2.5g/lit. of water alternating with cu-hydroxide 2g/lit. of water at 10 days interval plants with more canopy and to be sprayed with (Cymoxinil + Mencozeb) @ 1.5g/lit. of water. Follozied by Spraying with Mancozeb 75wp@2.5g/lit After 7 Days.
<b>Ginger, Turmeric</b>		Rhizome rot	Earthingup, weeding and drainingout of excess water. Turmeric In case of leaf yellowing due to rotting of rhizomes apply (Metalaxyl + Mancozeb) @2.5 g/ lit. of water as soil drenching.
<b>Legume vegetable</b>	Reproductive	Aphid, white fly	For Aphid control of Lab Lab bean apply Ash in case of lower infestation and in case of heavy infestation Thiomethoxam 0.3 SG @1g/3 lit.. of water may be applied.
<b>Crucifers</b>	Sowing of seedling		Treat the seeds with captan 50WP@3g/kg of seed before sowing. If rotting is observed on seedlings, then apply <b>Cupperoxy. Chloride @ 3g/lit. of water.</b>
<b>Cucurbits</b>	Fruiting	Fruit Fly Fruit & Vine rot White fly, Downy mildew	Collection and destruction of fruit fly infested fruits. Installation of pheromone trap @ 2/Bigha. Apply (Metalaxyl 8% + Mencozeb 64%) @ 2g/lit. of water or Azoxystrobin @1ml/lit. of water, if there is appearance of fruit rot or rotting of vines, mainly near soil surface. For white fly apply clothianidin 50 WDG@ 3g/10lit. of water. For downy mildew yellowish patches develop on upper surface of the leaf, below which whitish fungal growth seen. In such symptom apply Azoxystrobin @ 1 mili/ lit. of water.
<b>Brinjal</b>	Vegetative Fruiting,	fruit and shoot borer Nematode White fly, Jassid, Little Leaf	For the management of fruit and shoot borer one application of coragen @ 4 ml/tank. Cleanliness to be maintained. Apply Thiomethoxam 0.3 SG @1g/3lit. of water to manage sucking pests infestation. For nematode problem apply Fipronil <u>0.3G @1.5 Kg/Bigha</u> followed by a light irrigation or Nimitz 480 EC@ 4-8 lit/ha. could be applied against root knot nematode. For white fly and jassid, apply Acetamiprid 20% <u>SP@1g/3lit or Thiomithoxam 0.3 SG 1g/3lit</u> of water. Plants With Small Sized Leaves and Burchy appear am to be uprooted and Spreyed with Imidachloprid @5ml/lit of Water .
<b>Chilli</b>	vegetative	Aphid, white fly, Thrips Yellow mite,	For Aphid, hoppers, white fly and thrips apply Imidaclorprid 17.8 SL@1ml/5lit. of water or thiomethoxam @1g/3lit of water. For yellow mite apply propergite 2.5 ml/lit. of water.

### ANIMAL HUSBANDRY & FISHERY

Name of Animal	Disease	Control measures
Cattle and Buffalo	Non specific Diarrhoea, FMD	The cattle population are supposed to suffer from foot and mouth disease (FMD). Carpet vaccination of FMD may control out break of FMD gross breed population one rendered to defiling problem ,nutritional management needs to be .considered .an the mantis a course is proper doses are advisable for better performance .
Chicken	pox	Care for day old chicks with proper brooding, ventilation and management may reduce morbidity and mortality rate ND vaccine for chicken and DP immunization in duck is recommended as schedule .

## Gangetic Alluvial Zone

Crop	Stage	Advisory
Mustard	Vegetative stage	Plant spacing should be maintained at 12-15 cm by thinning. Intercultural operations like light spading and weeding should be done. If required, light irrigation should be given as there is no rainfall forecast.
Boro Paddy	Sowing	Start sowing of Boro paddy.
Gram and Pea	Vegetative stage	Intercultural operations like light spading and weeding should be done. In case of collar rot, drenching the soil with a combination of chlorothalonil (2g) + carbendazim (1 g)/lt of water.
Cabbage, Cauliflower, Broccoli, Tomato, Chilli, French Bean, Pointed Gourd, Cucumber	Vegetative	Intercultural operations like light spading and weeding should be done followed by 1 <sup>st</sup> top dressing of nitrogenous fertilizer and earthing up for cabbage, cauliflower, broccoli, tomato, chilli. After fertilizer application, light irrigation should be given. No need to apply nitrogenous fertilizer in case of french bean at this stage but other operations should be followed. For pointed gourd after sprouting/germination of vine/root cuttings, hand weeding followed by mulching with paddy straw should be done. If downy mildew appears in the leaf, alternate spraying with cymoxanil-mancozeb (Curzate) (2.5 g/lt) and fosetyl Al (Alliet) (2.5g/lt) at 10 days interval is very effective.
Rabi Maize	Sowing or Vegetative	Continue sowing of rabi Maize. Deep ploughing & sundrying of the field to prevent the attack of soil borne insect is advised. 1-2 ton cow dung manure or vermicompost is required at the time of final land preparation. 10 Kg Urea, 35 Kg SSP, 9Kg Potash may be added as basal. 2-2.5 Kg seed is needed per bigha for line sowing. Early varieties like Sathi, Kathi, Tin Pakhi, Medium varieties like Keti41, Janunpur, Late varieties like Ganga-1, 101,5 , D-Can, Ganga Safed etc are recommended. Light irrigation should be given for optimum moisture condition of the field to ensure proper germination.
Potato	Sprouting /Vegetative stage	If planting is done at end of November to first week of December, depending on the soil moisture, apply splash irrigation at 3-4 days interval up to 2-3 days before 1 <sup>st</sup> earthing up as there is no forecast of rainfall.  If planting is done before 15 <sup>th</sup> of November, light spading followed by hand weeding at this stage is necessary. First top dressing with 1/4 <sup>th</sup> amount of total



		nitrogen (200 kg N) + 1/4 <sup>th</sup> amount of total potash (150 kg) followed by earthing up should be done. Apply chloropyriphos @ 2.5 ml/lit of water against the attack of cut worm and leaf eating insect.
Rabi Onion & Garlic	Vegetative	Intercultural operations like light spading and weeding should be done. Propiconazole (Tilt) @ 1ml/l with a sticker 4-5 times starting from 15 days after transplanting to check purple blotch disease.
Flowers like Marigold, Chrysanthemum & Gladiolus	Vegetative	Intercultural operations like light spading and weeding should be done.
Spinach, Radish, Fenugreek, Coriander, Turnip	Vegetative	Extra seedlings should be thinned out. Intercultural operations like light spading and weeding should be done.
Mango Orchard	General	Wrapping of plastic sheets around mango trunk should be done for preventing climbing of young mealy bugs. Apply grease to seal any cracks in the polythene sheets. Irrigation should be done in all orchards.
Poultry	General	As the temperature is very low, arrange electric bulb for whole day in the cages of new born chicks. For avoiding moist condition of litter apply lime and old news paper in the litter.

## Coastal Saline Zone

Crop	Stage	Disease	Advisory
Boro rice	Seedling	Cold injury	To protect the seedlings from cold, cover the nursery bed with polythene. Keep stagnant water in the nursery bed especially for the night time. Start preparation of the main field for transplanting.
Wheat	Tillering	Yellow Rust	Give light irrigation. Low temperature favours yellow rust disease. Spray Mancozeb 75 Wettable Powder @ 2ml/lit of water.
Potato	Vegetative stage	Mite and Thrips	Give light irrigation. Spray Acephate-75% Wettable Powder @ 0.75g/lit of water.
Mustard	Flowering	---	Irrigate the crop at the time of flowering. Avoid unnecessary application of pesticide.
Fishery	<b>Fishery Management:</b> 1. Apply Lime (Calcium Carbonate) depending on water pH. Lime should be broadcasted in split doses. 2. Do health check-up of fish by periodical netting. 3. Diseased fish should be isolated from main stock and should be treated with potassium permanganate or Sodium chloride based on the severity of infestation.		
General	Crop coverage is moderate. The SPI map shows that the district is mildly dry in condition.		

So, farmers are advised to give a light irrigation to the standing crops.

## Vindhyan Alluvial Zone

Crop	Stage	Variety	Advisory
General	--	--	There seems to be possibility of no rainfall 5 <sup>th</sup> January to 9 <sup>th</sup> January. Spray should be done as per requirement.
Boro Rice	Seedling		If seedlings are becoming reddish, spray Tricyclozole @ 0.5g/liter of water and after one day spray Cheleted Zinc @ 1g/liter of water. Apply water to the nursery at evening and drain out at morning as night temperature is low.
Lentil	Growth stage	--	As temperature is lowing spray Carbendazim 50% @ 2g/liter of water as protective measures.
Winter Vegetables	Vegetative	Pest	Management of winter vegetable pest at early vegetative stage sprays Chlorpyriphos 50% + Cypermethin 5% @ 1.5 ml/liter of water.
Mustard	Growth	Leaf blight	To control leaf blight of mustard, spray copper oxychloride @ 3-4gram/liter of water.
Potato	Early vegetative	Insect	Management of Potato insect pests sprays Neem oil 1% @ 3ml/liter + Sandovit @ 0.5ml/liter at evening hours at 7 days interval.
Betel vine			To protect the Boroz from cold weather covered the Boroz with paddy straw.
Cattle	--	--	50-55 days after sowing of Berseem and 55-60 days of Oats, these can be harvested. Henceforth, Barseem can be harvested every 25-30 days.

## Undulating Red and Laterite Zone

Crop	Stage	Problem	Advisory

## Andaman & Nicobar Islands

### For North and Middle Andaman

Crop/Livestock	Stage	Weather based agro advisories
Rice	Harvest	<ul style="list-style-type: none"> <li>Harvest long duration rice (C 14-8) as light to moderate rainfall is expected during next five days.</li> </ul>
Fish	Growing	<ul style="list-style-type: none"> <li>Feed the fingerlings of Indian major carp with rice bran and ground nut oil cake at 1:1 ratio at the rate of 5 % of body weight.</li> </ul>
Poultry	Laying	<ul style="list-style-type: none"> <li>Poultry birds (layers) should be supplemented with dicalcium phosphate @ 2 gm per kg feed to continue laying efficiently.</li> </ul>

### For South Andaman

Crop/Livestock	Stage	Weather based agro advisories
Rice	Harvest	<ul style="list-style-type: none"> <li>Harvest long duration rice (C 14-8) as light to moderate rainfall is expected during next five days.</li> </ul>
Fish	Growing	<ul style="list-style-type: none"> <li>Feed the fingerlings of Indian major carp with rice bran and ground nut oil cake at 1:1 ratio at the rate of 5 % of body weight.</li> </ul>

Poultry	Laying	<ul style="list-style-type: none"> <li>Poultry birds (layers) should be supplemented with dicalcium phosphate @ 2 gm per kg feed to continue laying efficiently.</li> </ul>
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**For Nicobar**

Crop/Livestock	Stage	Weather based agro advisories
Vegetable	Sowing	<ul style="list-style-type: none"> <li>Prepare the land and sow the seed bitter gourd, bottle gourd and snake gourd, as the weather is conducive.</li> </ul>
Poultry	Laying	<ul style="list-style-type: none"> <li>Poultry birds (layers) should be supplemented with dicalcium phosphate @ 2 gm per kg feed to continue laying efficiently.</li> </ul>

For details please contact with AMFU/KPS /ADO's office of the respective area.