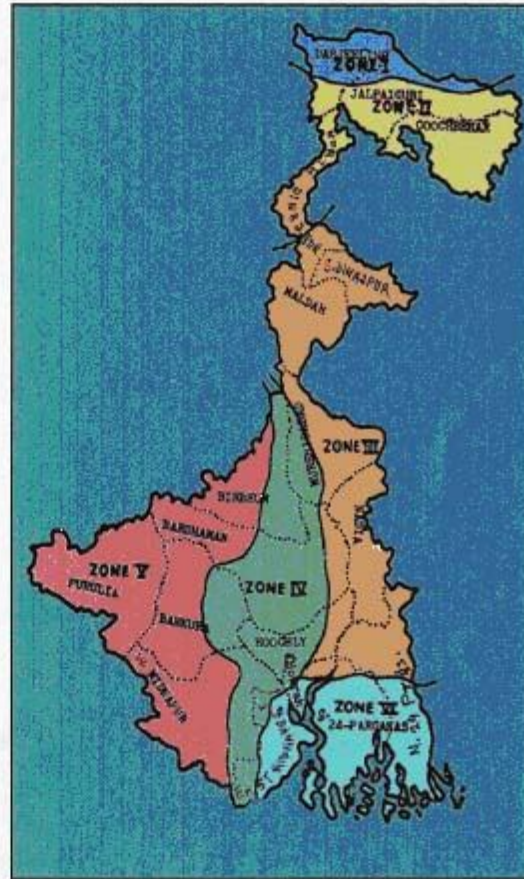


AGROMETEOROLOGICAL ADVISORY BULLETIN FOR THE STATE OF WEST BENGAL AND A&N ISLANDS

For the period from 13th March '2019 to 17th March '2019

AGROCLIMATIC REGIONS OF WEST BENGAL

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



Issued on
Tuesday, 12th March '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	Northern Hill Zone	Darjeeling	Kalimpong
2	Terai-Teesta Alluvial Zone	Jalpaiguri, Alipurduar, Coochbehar and Uttar Dinajpur.	Pundibari
3	Gangetic Alluvial Zone	Murshidabad, Nadia, North 24 Parganas, Howrah, Hooghly and Burdwan	Kalyani
4	Vindhyan Alluvial Zone	Dakhin Dinajpur, Malda	Majhian
5	Costal Saline Zone	South 24 Parganas and Purba Midnapore	Kakdeep
6	Undulating Red and Laterite Zone	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):

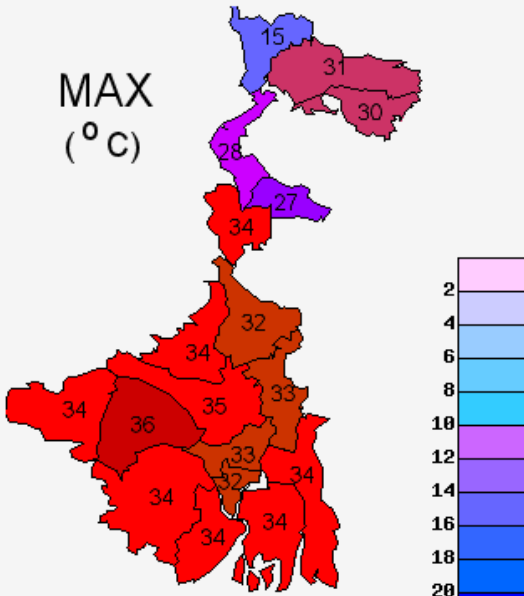
Gangetic West Bengal consists of Dakhin Dinajpur, Malda, Murshidabad, Nadia, South 24 Parganas, North 24 Parganas, Bankura, Purulia, Birbhum, Paschim Midnapore, Jhargram, Purba Midnapore, Kolkata, Burdwan.

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

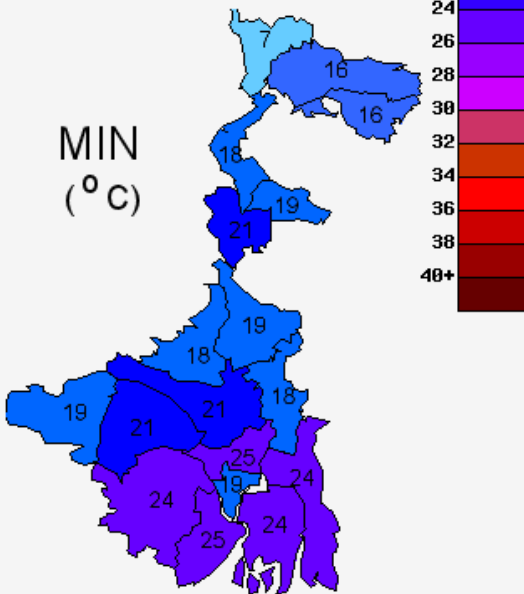
DAY 1 FORECAST

Valid up to :Wednesday 13th March 2019,0830 hrs IST

MAX (°C)

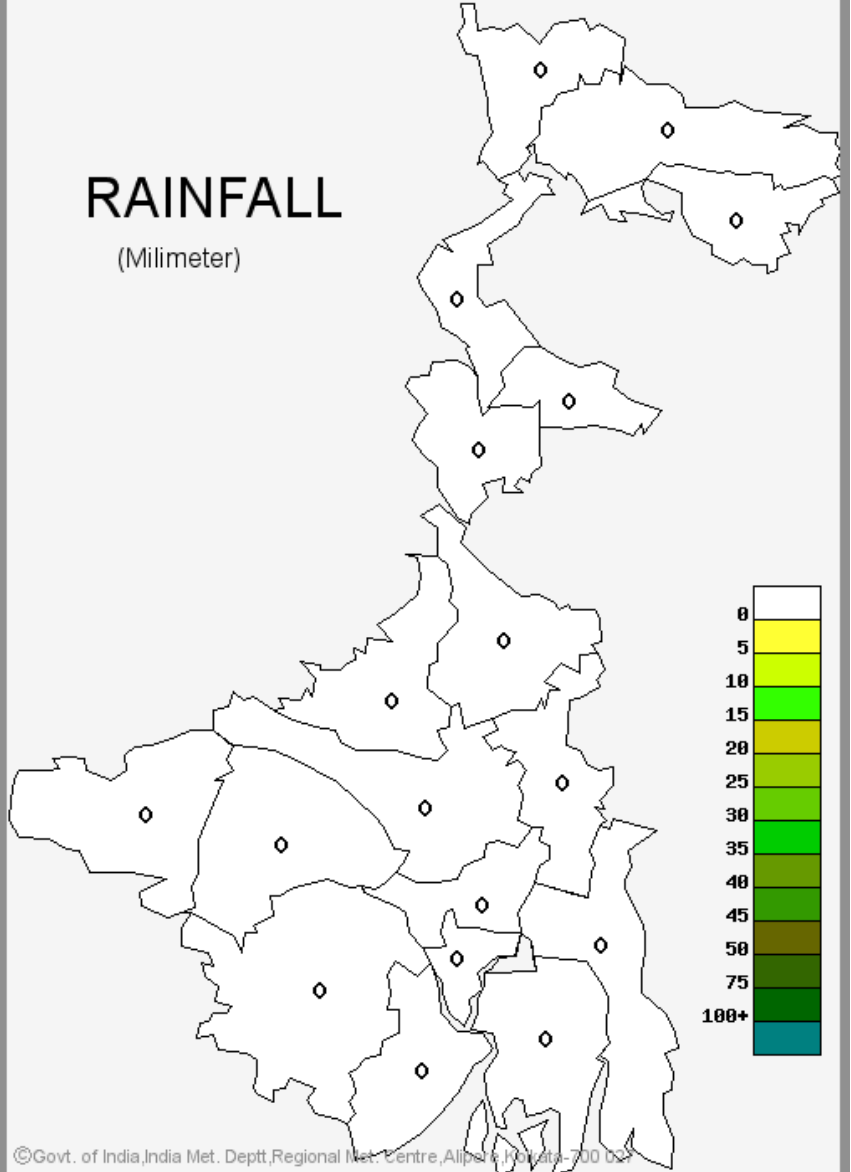


MIN (°C)



RAINFALL

(Milimeter)

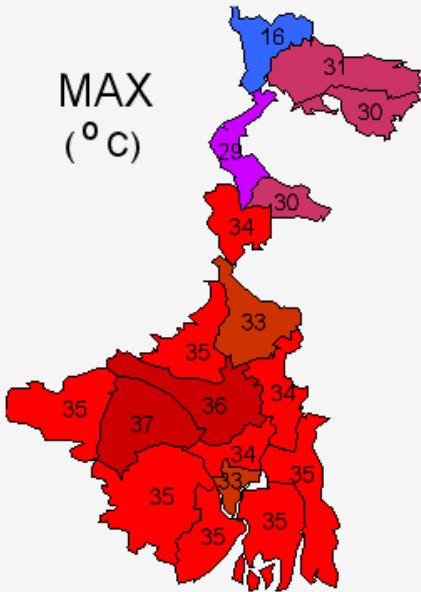


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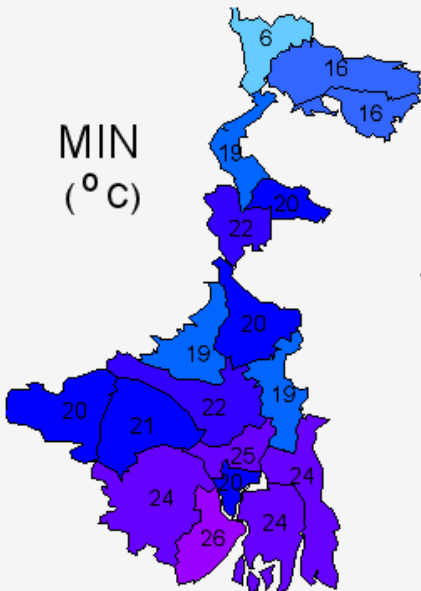
DAY 2 FORECAST

Valid up to :Thursday 14th March 2019,0830 hrs IST

MAX
(°C)

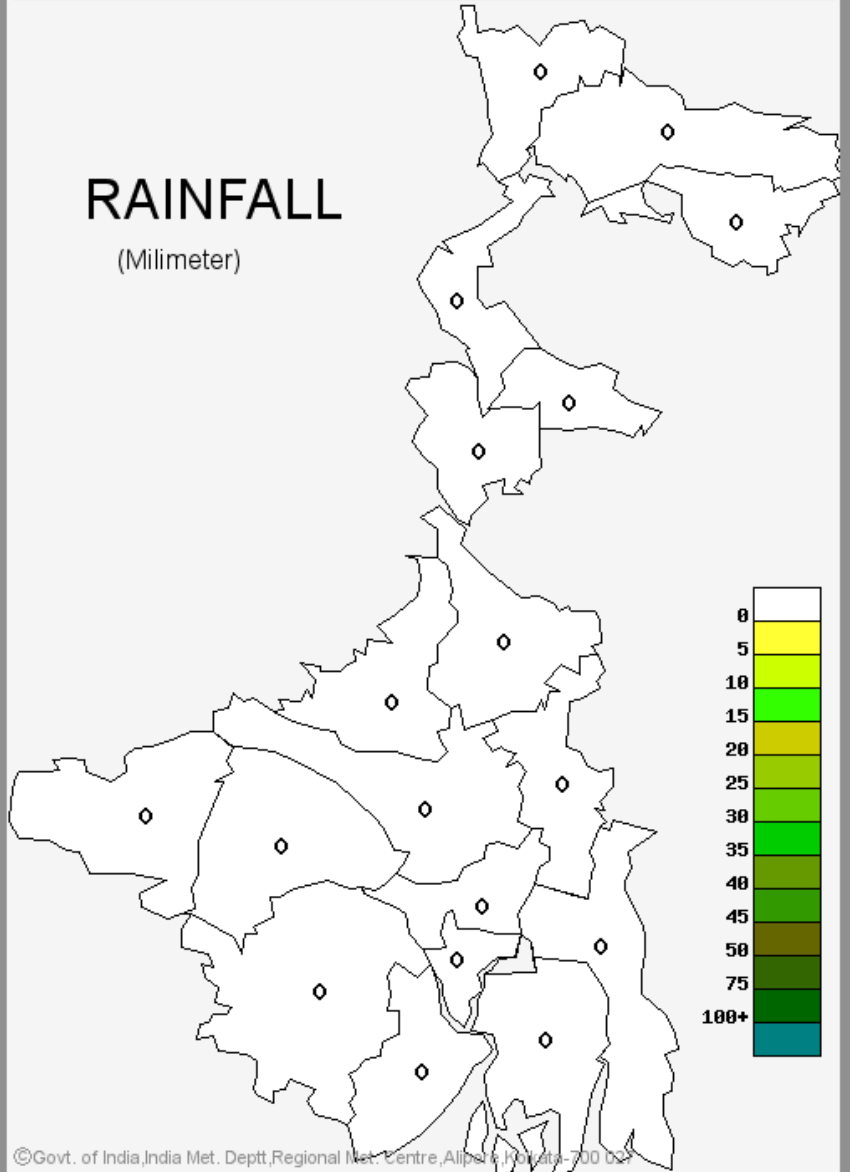


MIN
(°C)



RAINFALL

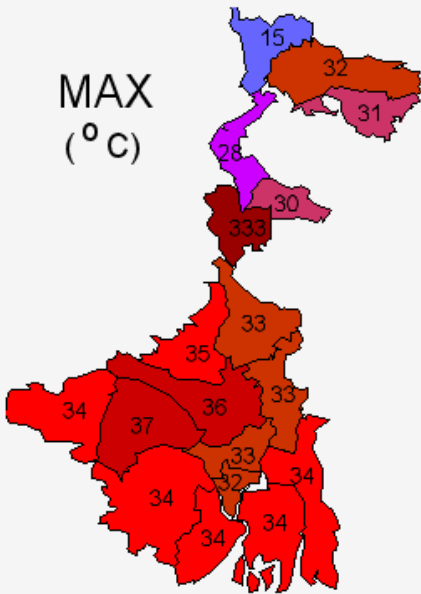
(Milimeter)



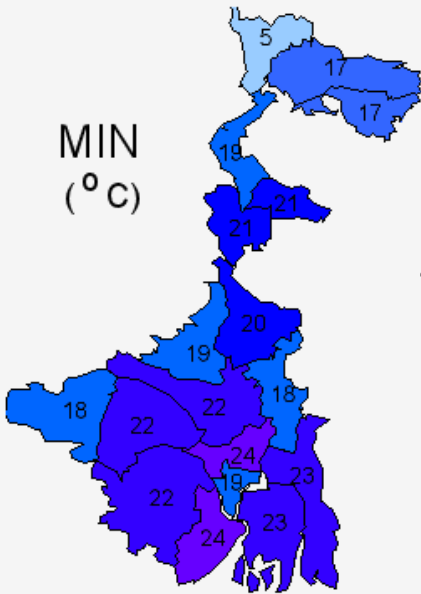
DAY 3 FORECAST

Valid up to :Friday 15th March 2019,0830 hrs IST

MAX
(°C)

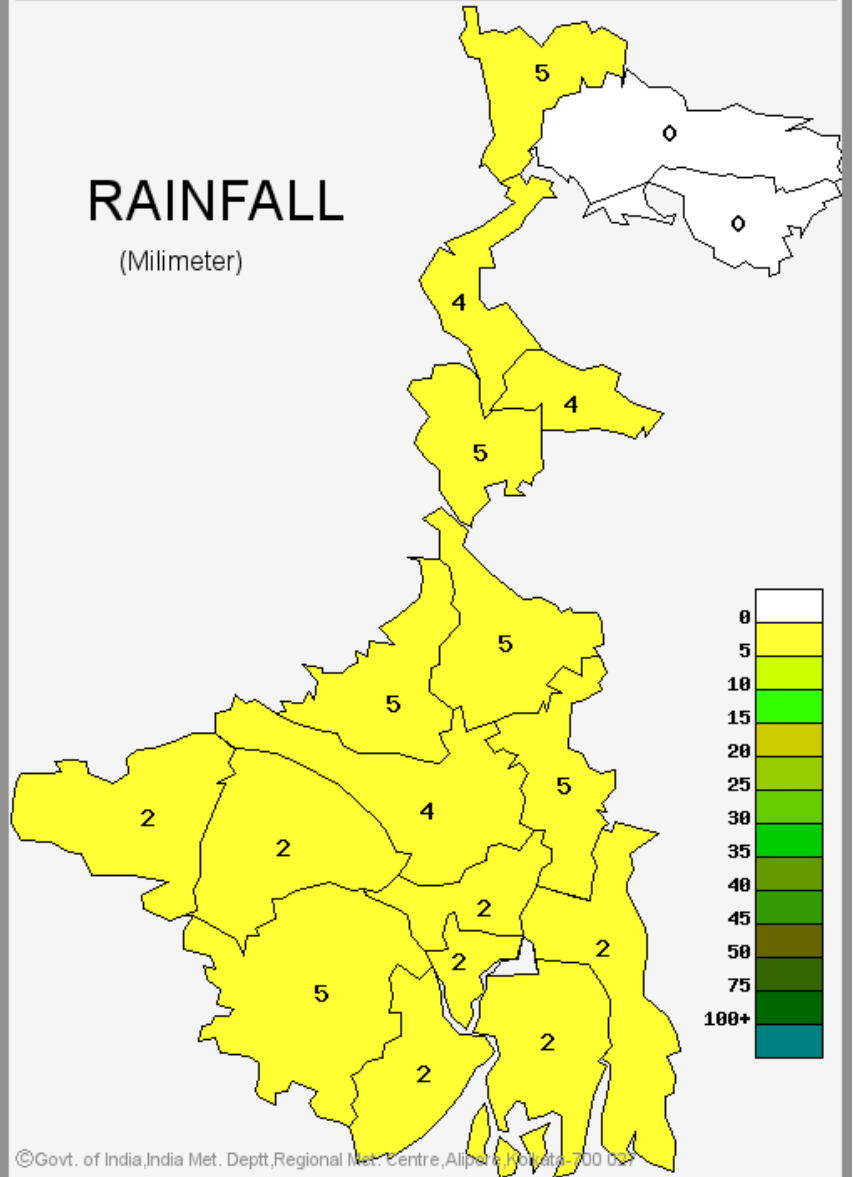


MIN
(°C)



RAINFALL

(Milimeter)

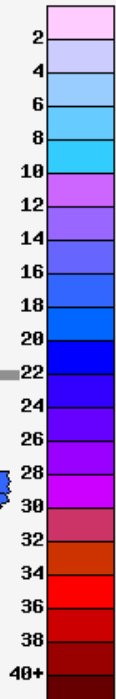
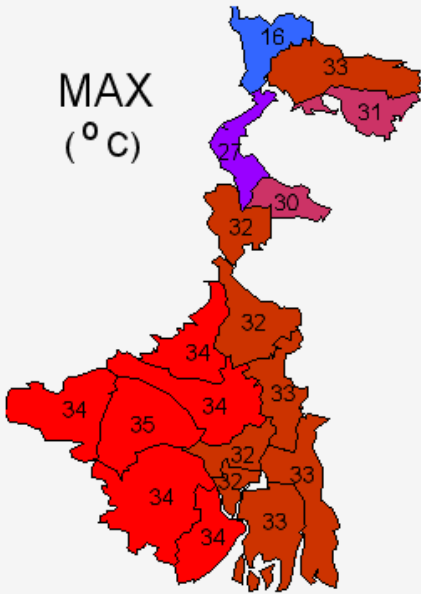


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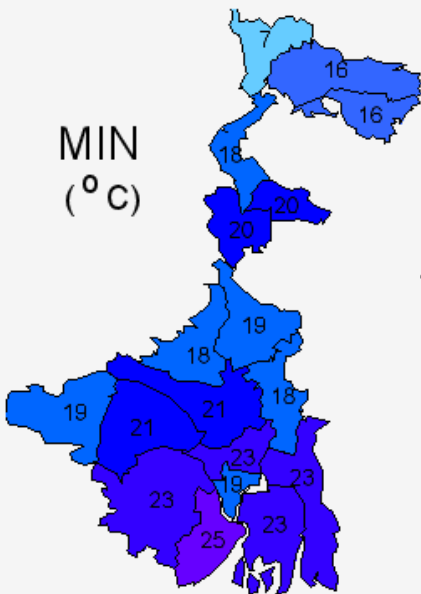
DAY 4 FORECAST

Valid up to :Saturday 16th March 2019,0830 hrs IST

MAX
(°C)

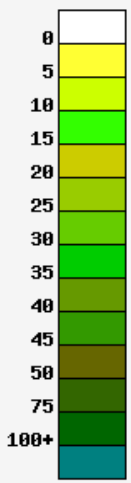
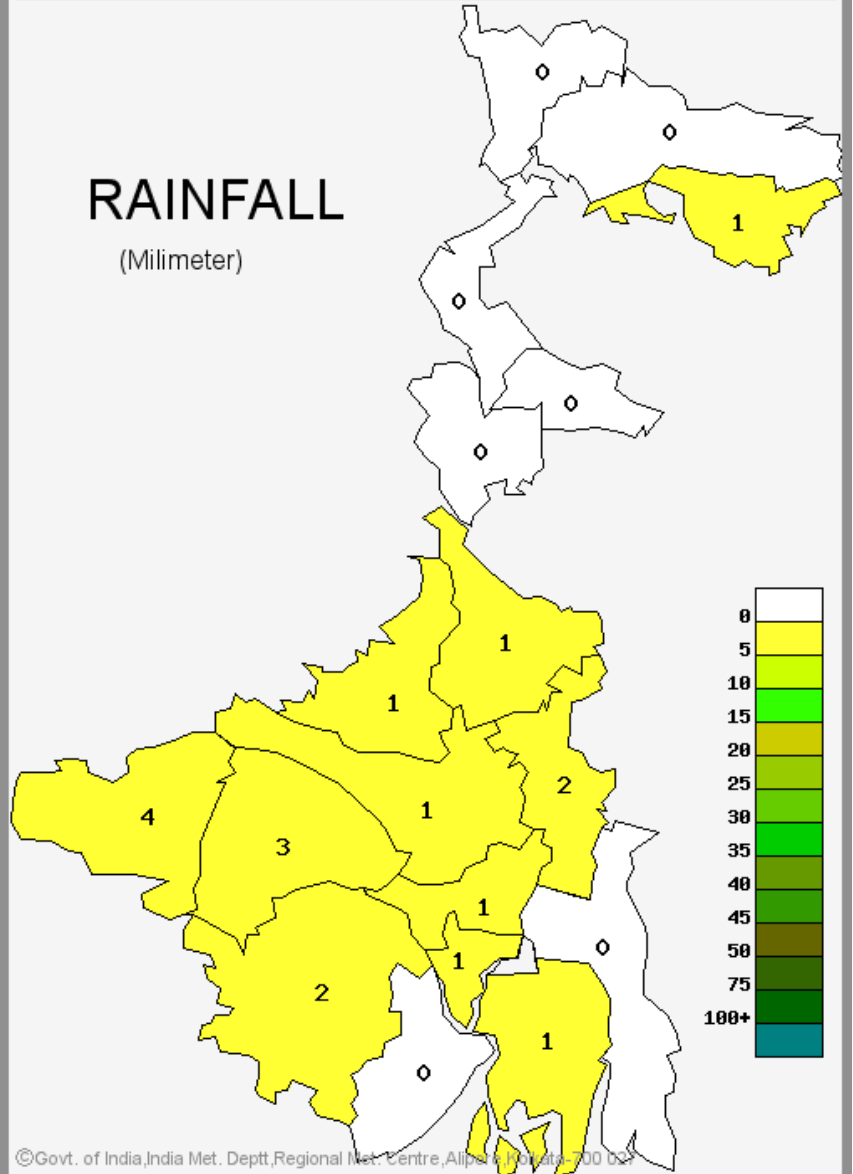


MIN
(°C)



RAINFALL

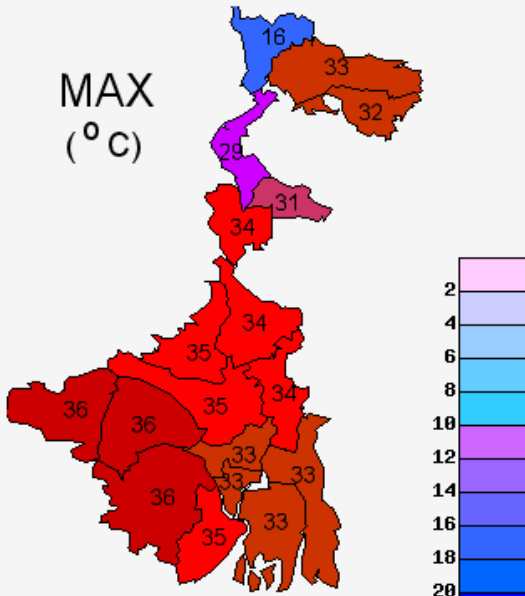
(Milimeter)



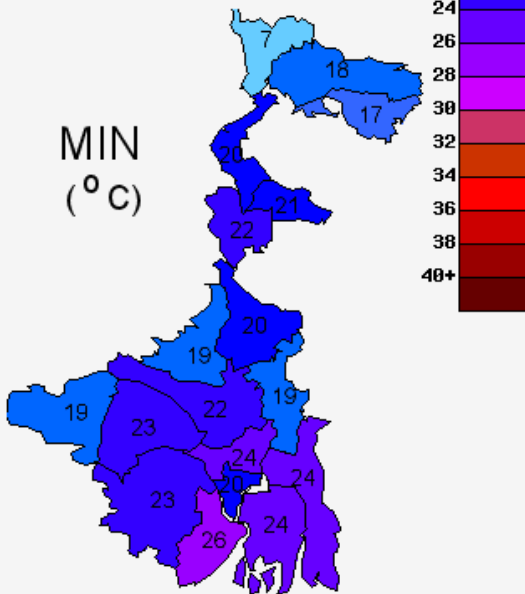
DAY 5 FORECAST

Valid up to : Sunday 17th March 2019, 0830 hrs IST

MAX
(°C)

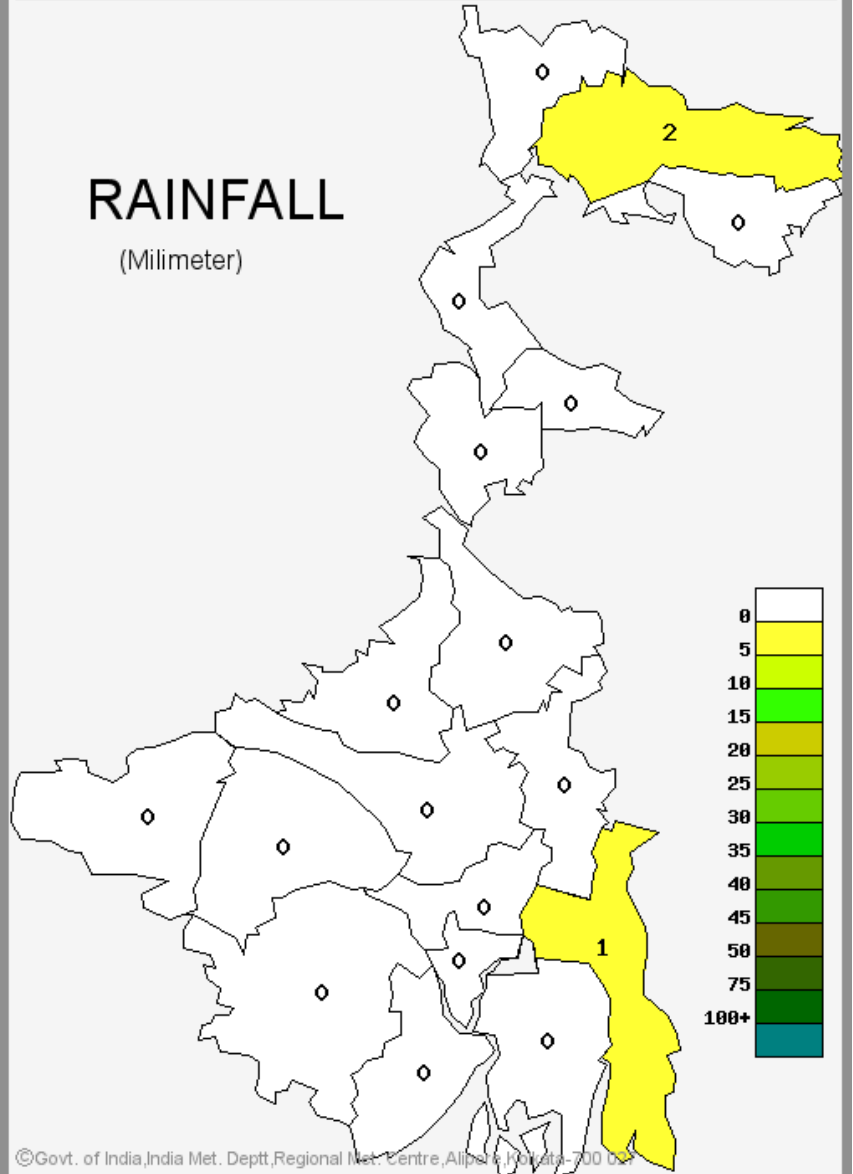


MIN
(°C)



RAINFALL

(Milimeter)



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Part I: Weather

Districtwise significant Past Weather in different agroclimatic zones for the period 08/03/19 to 11/03/19

District level Weather Forecast for different agroclimatic zones for the period 13/03/19 to 17/03/19

West Bengal

Northern Hill Zone

DARJEELING

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	14-15	5-5	88-95
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

DARJEELING

Terai-Teesta Alluvial Zone

COOCH BEHAR

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	27-29	11-15	55-70
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

COOCHBEHAR

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JALPAIGURI

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	28-30	12-16	50-70
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

JALPAIGURI

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NORTH DINAJPUR

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	27-29	11-15	40-80
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

NORTH DINAJPUR

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Gangetic Alluvial Zone

BURDWAN

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-34	15-20	65-83
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

BURDWAN

Clear sky is expected during next 5 days .

No rainfall to little rainfall (15th , 16th March) is expected during rest 5 days & total will be 9 mm.

Wind flow mainly from W, SE direction with 3.0- km/hr. speed during next 5 days is expected.

Maximum relative humidity is expected to be around 50-68% and minimum relative humidity is expected to be around 23% - 36%.

Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 20.0°C - 21.0°C.

MURSHIDABAD

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	24-31	15-17	55-80
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

MURSHIDABAD

Clear sky & partly cloudy sky (15th,16th March) expected during next 5 days .

No rainfall to little rainfall (15th March) is expected during rest 5 days & total will be 7 mm.

Wind flow mainly from NE, E, NW direction with 3-9.0 km/hr. speed during next 5 days is expected.

Maximum relative humidity is expected to be around 29-64% and minimum relative humidity is expected to be around 16% - 29%.

Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 20.0°C - 22.0°C.

NADIA

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	32-32	15-20	45-90
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

NADIA

Clear sky is expected during next 5 days .

No rainfall to little rainfall (15th , 16th March) is expected during rest 5 days & total will be 10 mm.

Wind flow mainly from S, W, SW, SE direction with 2-8.0 km/hr. speed during next 5 days is expected.

Maximum relative humidity is expected to be around 46-69% and minimum relative humidity is expected to be around 22% - 33%.

Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 20.0°C - 22.0°C.

HOOGHLY

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-32	15-24	60-93
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

HOOGHLY

Clear sky is expected during next 5 days .

No rainfall to little rainfall (15th , 16th March) is expected during rest 5 days & total will be 7 mm.

Wind flow mainly from W, SW,NW,NE direction with 4.0- 9.0 km/hr. speed during next 5 days is expected.

Maximum relative humidity is expected to be around 56-76% and minimum relative humidity is expected to be around 28% - 36%.

Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 22.0°C - 23.0°C.

HOWRAH

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	29-32	16-18	55-85
Saturday	--			
Sunday	0.0			
Monday	0.0			

HOWRAH

Clear sky is expected during next 5 days .
 No rainfall to little rainfall (15th , 16th March) is expected during rest 5 days & total will be 6 mm.
 Wind flow mainly from SW, W, NW, NE direction with 6.0- 11.0 km/hr. speed during next 5 days is expected.
 Maximum relative humidity is expected to be around 56-77% and minimum relative humidity is expected to be around 29% - 35%.
 Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 22.0°C - 23.0°C.

NORTH 24 PGS

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-32	19-25	45-85
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

NORTH 24 PGS

Clear sky & partly cloudy sky (16th March) is expected during next 5 days .
 No rainfall to little rainfall (14th , 15th March) is expected during rest 5 days & total will be 8 mm.
 Wind flow mainly from W, SW, NE, W,NW direction with 6.0- 10.0 km/hr. speed during next 5 days is expected.
 Maximum relative humidity is expected to be around 56-77% and minimum relative humidity is expected to be around 27% - 34%.
 Maximum temperature is expected to be around 34.0°C - 36.0°C and minimum temperature is expected to be around 22.0°C - 24.0°C.

Vindhyan Alluvial Zone**DAKSHIN DINAJPUR**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	27-29	11-15	40-80
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

DAKSHIN DINAJPUR

•

MALDA

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	29-33	17-20	25-80
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

MALDA

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Coastal Saline Zone

PURBA MIDNAPUR

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-33	20-25	50-90
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

PURBA MIDNAPUR**SOUTH 24-PGS**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-33	18-23	45-85
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

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

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	32-35	16-24	55-95
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

PASCHIM MIDNAPORE

Very light rainfall on Friday, Saturday and Sunday and partially clear sky will be present for the coming five days.

- Predominant wind direction will be Southwesterly. Wind with a speed of 9-10 km per hour will blow for coming five days.
- Relative humidity maximum will be 67-79 % and minimum will be 19-34%
- Maximum temperature will be 33-37°C and minimum will be 20-23°C.

**BANKURA**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	32-35	16-21	25-85
Saturday	0.0			
Sunday	0.0			
Monday	0.2			

BANKURA

Very light rainfall on Friday and Sunday and partially clear sky will be present for the coming five days.

- Predominant wind direction will be Southwesterly. Wind with a speed of 7.3-12.2 km per hour will blow for coming five days.
- Relative humidity maximum will be 61-76% and minimum will be 17-31%
- Maximum temperature will be 35-37°C and minimum will be 21-22°C.

PURULIA

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-33	13-16	25-75
Saturday	0.0			
Sunday	0.0			
Monday	2.0			

PURULIA

Very light rainfall on Friday and Sunday and partially clear sky will be present for the coming five days.

- Predominant wind direction will be Southwesterly. Wind with a speed of 6.7-12 km per hour will blow for coming five days.
- Relative humidity maximum will be 42-79 % and minimum will be 19-26 %
- Maximum temperature will be 34-36°C and minimum will be 19-24°C.



BIRBHUM

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	30-33	14-19	40-85
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

BIRBHUM

Very light rainfall on Friday and Sunday and partially clear sky will be present for the coming five days.

- Predominant wind direction will be Southwesterly. Wind with a speed of 8.2-12.1 km per hour will blow for coming five days.
- Relative humidity maximum will be 34-72 % and minimum will be 15-28%
- Maximum temperature will be 34-35°C and minimum will be 18-19°C.
-

Andaman & Nicobar Islands**ANDAMAN**

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	29-33	22-23	55-85
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

NORTH MIDDLE ANDAMAN

Bright sunshine hour is likely to occur during next three days. In Rangat block no rainfall is expected during this period. The maximum temperature in Rangat block will be 32.8 to 34.9 °C with minimum temperature of 23.2 to 24.8 °C, whereas the maximum and minimum relative humidity is expected to be in the range of 77 to 82 %, and 37 to 46 % respectively in Rangat block. Wind speed of 4 to 8 km/h is expected from North Westerly direction.

SOUTH ANDAMAN.

- Bright sunshine hour is likely to occur during next three days. In Prothrapur block no rainfall is expected during this period. The maximum temperature in Prothrapur block will be 32.4 to 33.8 °C with minimum temperature of 23.6 to 24.3 °C, whereas the maximum and minimum relative humidity is expected to be in the range of 72 to 78 %, and 60 to 62 % respectively in Prothrapur block. Wind speed of 7 to 13 km/h is expected from North Westerly direction.

NICOBAR

Days	Rainfall (mm)	Maxi Temp (°C)	Mini Temp (°C)	Relative Humidity (%)
Friday	0.0	29-30	23-25	60-70
Saturday	0.0			
Sunday	0.0			
Monday	0.0			

NICOBAR

- Bright sunshine hour is likely to occur during next three days. In Nan-cowrie block 0.5 mm of rainfall is expected during this period. The maximum temperature in Nan-cowrie block will be 31.7 to 32.5 °C with minimum temperature of 25.2 to 25.6 °C, whereas the maximum and minimum relative humidity is expected

Part II: Agroclimatic zonewise Agricultural/Agro meteorological Advisories

West Bengal

Northern Hill Zone

MAJOR CROPS	STAGE	PEST & DISEASES	ADVISORY

Terai-Teesta Alluvial Zone

Advisory

GENERAL Very light rainfall will occur from 06 March, and no rainfall will occur from 07 to 10 March

Agriculture and Horticulture

Main Crops	Stage	Pest & Diseases	Advisory

Animal Husbandry

Name of Animal	Disease	Control measures

Gangetic Alluvial Zone

Crop	Stage	Advisory
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According to NDVI data sent by IMD agricultural vigour of New Alluvial Zone of West Bengal will be Moderate in the coming week.

Mustard	Pod formation stage	Be careful for aphid infestation. Immediately spray Imidachloprid (Confidor) @ 3ml/10 litre of water. Intercultural operations like weeding and rouging should be done. If required, light irrigation may be given as there is no rainfall forecast.
Boro	Max. tillering stage	Start management of main field regarding all aspects like weed control, fertilizer management. Be careful regarding disease, pest management. To control pest apply Cartap 4G, Carbofuran 3G, Phorate 10 G etc. and to control disease spray hexaconazole @ 1ml/lit.
Cabbage, Cauliflower, Broccoli, Tomato, Chilli, French Bean, Pointed Gourd, Cucumber, Brinjal	Fruit Setting/ Vegetative	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/lit) and Fosetyl Al (Alliet) (2.5g/lit) at 10 days interval is very effective. 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 Carbofuron 3G @4.5kg /Bigha 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% SP@1g/3lit. or Thiomethoxam 0.3 SG 1g/3lit. of water. Plants with small sized

		leaves and bunchy appearance plants to be uprooted and sprayed with Imidachloprid @0.5ml/lit of Water. For control of bacterial wilt in solanaceous vegetable stop irrigation immediately, uproot the plant carefully and apply bleaching powder or fresh cow dung mixture around the infected plant to control the spreading of disease in the field. For management of fruit borer in the tomato apply Indoxacarb 1ml/lit. of water insecticide mixture at 7 days interval thrice.
Rabi Onion & Garlic	Vegetative	Intercultural operations like light spading and weeding should be done. Propiconazole (Tilt) @ 1ml/litre with a sticker 4-5 times (at 7 days interval) starting from 15 days after transplanting to check purple blotch disease
Mango and Guava	Fruit setting stage	i) Spray either Imidachloprid (Confidor) @ 3ml/10 litres of water or Acetamiprid (Asataf) @ 1 ml/litre of water for controlling mango hopper ii) When inflorescence attain 4 inches (emergence of axis) or just before flowering apply Tridemethon (Beledan) @ 1 g/litre of water with sticker (Tiptop/diamond) iii) Immediately after fruit setting apply Thiophenet methyl @ 1 g/litre – 3 sprays at 15 days interval iv) Irrigation should be done in all orchards. v) Apply FYM @ 10-12 kg and Sufala / DAP @ 1 kg per plant.
Poultry	General	Care for day old chicks with proper brooding, ventilation and management may reduce morbidity and mortality rate
Fishery	General	i) Against Ulcer disease take preventive measure with application of 10-14 kg Lime per bigha fish pond. ii) For control of Ulcer disease, apply 13 kg Lime per bigha fish pond. Then after 7 days, apply 1.3 kg bleaching powder per bigha fish pond. iii) In order to avoid bird menace, give net covering over the fish pond. iv) for new pond preparation cultivate <i>Dhaincha</i>
Mustard	Pod formation stage	Be careful for aphid infestation. Immediately spray Imidachloprid (Confidor) @ 3ml/10 litre of water. Intercultural operations like weeding and rouging should be done. If required, light irrigation may be given as there is no rainfall forecast.
Boro	Max. tillering stage	Start management of main field regarding all aspects like weed control, fertilizer management. Be careful regarding disease, pest management. To control pest apply Cartap 4G, Carbofuran 3G, Phorate 10 G etc. and to control disease spray hexaconazole @ 1ml/lit.
Cabbage, Cauliflower, Broccoli, Tomato, Chilli, French Bean, Pointed Gourd, Cucumber, Brinjal	Fruit Setting/ Vegetative	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/lit) and Fosetyl Al (Alliet) (2.5g/lit) at 10 days interval is very effective. 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 Carbofuron 3G @4.5kg /Bigha 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% SP@1g/3lit. or Thiomithoxam 0.3 SG 1g/3lit. of water. Plants with small sized leaves and bunchy appearance plants to be uprooted and sprayed with Imidachloprid @0.5ml/lit of Water. For control of bacterial wilt in solanaceous vegetable stop irrigation immediately, uproot the plant carefully and apply bleaching powder or fresh cow dung mixture around the infected plant to control the spreading of disease in the field. For management of fruit borer in the tomato apply Indoxacarb 1ml/lit. of water insecticide mixture at 7 days interval thrice.
Rabi Onion & Garlic	Vegetative	Intercultural operations like light spading and weeding should be done. Propiconazole (Tilt) @ 1ml/litre with a sticker 4-5 times (at 7 days interval) starting from 15 days after transplanting to check purple blotch disease

Coastal Saline Zone

Crop	Stage	Disease pest	Advisory

Vindhyan Alluvial Zone

Crop	Stage	Variety	Advisory

Fishery

Undulating Red and Laterite Zone

Crop	Stage	Problem	Advisory
Boro rice	Active Tillering	Weeds Blast	Remove the weeds by hand weeding in the field and Keep the bunds clean. Maintain the water level upto 2 cm in the field. Avoid excess nitrogen application. Spray Tricyclozole 75WP@ 1g/lit of water at clear weather conditions
Wheat	Dough stage	---	It is the final growth stage of the crop. Restrict irrigation.
Groundnut	Flowering	---	When the crop at the age of 35-40 DAS, Spray nutrient solution Groundnut rich @ 38g/lit at clear weather condition for improving pod filling in the crop.
Pointed gourd	Vegetative stage	Fruit fly	Apply Malathion 50 EC 1 ml/lit of water at late afternoon at clear weather condition.
Fishery	Fishery Management: 1. For any bacterial disease infection Dip treatment of fish in Copper sulphate @5mg/lit of water for 1 minute. 2. Broadcast 6-7g potassium permanganate for decimal water body for continue 7 days at night.		
General	Crop coverage is less and soil is mildly dry in condition. Air temperatures are increased slightly and irrigation may not be provided due to slight rainfall.		

Andaman & Nicobar Islands

For North and Middle Andaman

Crop/Livestock	Stage	Weather based agro advisories
Pulses	Flowering	Spray DAP @ 2 % (20 g/lit) in pulses during flowering stage for uniform flowering.
Vegetable	Fruiting	Deploy pheromone traps and light traps @ 4/acre in tomato to attract the fruit borer adult moths as the weather is conducive for growth of this pest. Provide

		cool, clean water and shade to chicks to protect from heat.
Pig	All	Keep the pig inside shed and provide cool drinking water to avoid heat stress.

For South Andaman

Crop/Livestock	Stage	Weather based agro advisories
Vegetable	All	Make small basin around the gourds (Bottle gourd, Pumpkin, Snake gourd etc) and use drip to supply required water.
Pig	All	Keep the pig inside shed and provide cool drinking water to avoid heat stress.
Vegetable	All	Make small basin around the gourds (Bottle gourd, Pumpkin, Snake gourd etc) and use drip to supply required water.

For Nicobar

Crop/Livestock	Stage	Weather based agro advisories
Coconut	All	Clear the crown of coconut tree and remove the old bunches to avoid the attack of rhinoceros beetles.
Pig	All	Keep the pig inside shed and provide cool drinking water to avoid heat stress.

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