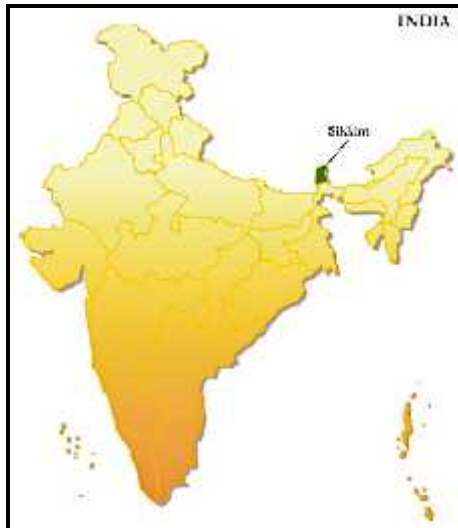




STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 23TH MARCH TO 27TH MARCH'2019



IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK



ISSUED ON TUESDAY 22TH MARCH'2019

Meteorological Sub-division of Sikkim

As per India Meteorological Department's classification, Sikkim is a part of Met Sub-Division of Sub Himalayan West Bengal & Sikkim (SHWB & SKM) and is divided into four (4) Districts:

- 1) North District with HQ at Mangan
- 2) East District with HQ at Gangtok
- 3) West District with HQ at Gyalsing
- 4) South District with HQ at Namchi

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

Value Added forecast for NORTH-DISTRICT for next five days

Parameter/Date	23/03/2019	24/03/2019	25/03/2019	26/03/2019	27/03/2019
Rainfall (mm)	Very light	No rain	No rain	Very light	Light rainfall
Max Temp (°C)	24	24	24	23	22
Min Temp (°C)	12	12	12	12	13
Sky condition	Partially clear	Mainly clear	Mainly clear	Partially clear	Partially clear
Max RH (%)	82	82	84	87	87
Min RH (%)	72	72	73	75	75
Wind Speed (Kmph)	3	3	2	2	3
Wind Direction (deg)	SW	SW	S	SE	SW

Northerly- **N**, North-Easterly- **N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly-**W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
	(mm)	(°C)	(°C)
19/3/2019	N/A	27.0	N/A
20/3/2019	040	19.0	08.0
21/3/2019	011	20.5	08.1

Weather forecast valid up to 27th march 2019

- Probability of very light rainfall
- Max temp may be vary from 22-24°C, whereas, Min temp may vary from 12-13°C
- Sky will remain partially clear
- Max RH is likely to be 82-87 %, whereas, Min RH may var from 52-65%
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from south westerly to southerly then south easterly
- Weekly cumulative rainfall= 8 mm

Value Added forecast for EAST-DISTRICT for next five days

Parameter/Date	23/03/2019	24/03/2019	25/03/2019	26/03/2019	27/03/2019
Rainfall (mm)	No rain	No rain	No rain	Very light	Light
Max Temp (°C)	20	20	20	19	19
Min Temp (°C)	11	11	11	10	10
Sky condition	Generally cloudy	Partially clear	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	80	80	82	86	86
Min RH (%)	70	70	73	75	75
Wind Speed (Kmph)	2	2	3	3	2
Wind Direction (deg)	NE	NE	NE	NE	N

Northerly- **N**, North-Easterly- **N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly-**W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
	(mm)	(°C)	(°C)
19/3/2019	017	16.7	07.4
20/3/2019	020	14.1	08.2
21/3/2019	045	15.2	09.0

Weather forecast valid up to 27th march 2019

- Probability of very light rainfall
- Max temp may be vary from 19-20°C, whereas, Min temp may vary from 10-11°C
- Sky will remain generally cloudy
- Max RH is likely to be 80-86%, whereas, Min RH may var from 70-75%
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from North easterly to northerly
- Weekly cumulative rainfall= 5 mm

Value Added forecast for SOUTH-DISTRICT for next five days

Parameter/Date	23/03/2019	24/03/2019	25/03/2019	26/03/2019	27/03/2019
Rainfall (mm)	No rain	No rain	No rain	No rain	No rain
Max Temp (°C)	23	23	23	23	22
Min Temp (°C)	13	13	13	12	12
Sky condition	Partially clear	Partially clear	Partially clear	Generally cloudy	Generally cloudy
Max RH (%)	77	77	77	79	79
Min RH (%)	62	62	62	66	66
Wind Speed (Kmph)	4	4	3	3	4
Wind Direction (deg)	NE	NE	NE	NE	N

Northerly- **N**, North-Easterly- **N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly-**W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
	(mm)	(°C)	(°C)
19/3/2019	N/A	N/A	N/A
20/3/2019	N/A	N/A	N/A
21/3/2019	N/A	N/A	N/A

Weather forecast valid up to 27th march 2019

- There is no Probability of rain
- Max temp may be vary from 22-23°C, whereas, Min temp may vary from 12-13°C
- Sky will remain partially clear
- Max RH is likely to be 77-79 %, whereas, Min RH may var from 62-66%
- Wind speed may likely vary from 3-4 km/hr.
- Wind direction may blow from North easterly to Northerly
- Weekly cumulative rainfall= 0 mm

Value Added forecast for WEST-DISTRICT for next five days

Parameter/Date	23/03/2019	24/03/2019	25/03/2019	26/03/2019	27/03/2019
Rainfall (mm)	No rain	No rain	No rain	Very light rain	No rain
Max Temp (⁰ C)	21	22	23	22	22
Min Temp (⁰ C)	11	11	12	12	10
Sky condition	Generally cloudy	Partially clear	Partially clear	Generally cloudy	Generally cloudy
Max RH (%)	80	80	80	88	84
Min RH (%)	70	70	70	76	73
Wind Speed (Kmph)	3	3	3	4	4
Wind Direction (deg)	NW	NW	NW	NW	NW

Northerly- **N**, North-Easterly- **N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly-**W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
19/3/2019	001	19.2	07.1
20/3/2019	005	N/A	09.6
21/3/2019	006	18.4	N/A

Weather forecast valid up to 27th march 2019

- Probability of very light rain
- Max temp may be vary from 21-23°C, whereas, Min temp may vary from 10-12°C
- Sky will remain Generally cloudy
- Max RH is likely to be 80-88%, whereas, Min RH may var from 70-76%
- Wind speed may likely vary from 3-4 km/hr.
- Wind direction may blow from North westerly
- Weekly cumulative rainfall= 2 mm

AGRO-METEOREOLOGICAL ADVISORIES

General Advisories for all the crops/ livestock

- Harvest the matured crops to avoid damage from hailstorm
- Apply dolomite/agricultural lime at least 10 days prior to sowing the Kharif crops
- *Jalkund* should be dug out for rain water harvesting.
- Spraying of plant protection bio pesticides on bright sunny day for insect and disease management is recommended.
- Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- De-worming with Fenbendazole @ 10 mg / kg body weight.
- Protect animals from cold by providing protective cover/ house and light.

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<i>Agricultural and Horticultural crops:</i>			
Maize	Land preparation and sowing		<ul style="list-style-type: none"> ◆ Maize sowing should be done at 5-6 cm depth with a spacing of 60 cm × 20 cm (row × plant) ◆ Provide adequate drainage facilities ◆ Apply dolomite @ 0.5 t/ha in furrows ◆ Apply well decomposed FYM @ 2.5 t/ha + mixed compost 2.5 t/ha + 0.5 t/ha neem cake and mix properly with soil 7-10 days before sowing
Buckwheat	Harvesting		<ul style="list-style-type: none"> ◆ Should done at physiological maturity
Mustard/Toria	Harvesting		<ul style="list-style-type: none"> ◆ Should done at physiological maturity
Ginger	Field preparation		<ul style="list-style-type: none"> ◆ Identify healthy plants for seed rhizomes. ◆ Selected rhizomes for planting material should be kept in partial shade for better sprouting. ◆ Store the seed rhizome in the pit for a month to break the dormancy ◆ Forest litter should be collected well in advance as mulching material. ◆ Apply well decomposed FYM @ 20-25 t/ha + 1.0 t/ha neem cake and mix properly with soil 7-10 days before

			<p>sowing.</p> <ul style="list-style-type: none"> ◆ Broadcast dolomite @ 2 t/ha before sowing and mix properly with soil.
Large cardamom	Post-harvest crop management		<ul style="list-style-type: none"> ◆ Regular monitoring for pest and disease incidence. ◆ Shade management with the proper lopping of trees.
Early kharif vegetables	Land preparation and Sowing		<ul style="list-style-type: none"> ◆ Seed sowing of okra, beans etc. can be done
Pea	Pod maturity, harvesting		<ul style="list-style-type: none"> ◆ Soil moisture should be maintained for good yield. ◆ Harvest the fully developed pod in early morning. ◆ For green pods of pea, pick/harvest at 4-5 days interval so as to stimulate generation of new flowers. ◆ Cautious picking should be done to avoid plant damage
Tomato/Red cherry pepper/Brinjal	Transplanting	Fruit borer/ white fly/ late blight	<ul style="list-style-type: none"> ◆ Nursery should prepare at 15 cm of height with 1 m width and length as per farmers convenience. ◆ 25-28 days old seedlings should be planted at 60 cm × 45 cm ◆ Bed should be prepared to a fine tilth by mixing well decomposed FYM @ 5 kg/m² and vermicompost @ 150 g/m² incubated with 1% <i>Trichoderma viride</i> for management of soil borne diseases. ◆ Use biodegradable polyfilm for mulching
Sikkim Mandarin	Vegetative flush		<ul style="list-style-type: none"> ◆ Basin maintenance and manuring with FYM @ 30-35 kg/tree should be done. Avoid application of FYM close to the trunk. ◆ Tree trunk should be painted with Bordeaux mixture @ 1%.
<i>Animal Sciences and livestock management</i>			
Tibetan Sheep			<ul style="list-style-type: none"> ◆ Feeding of concentrate feed along with mineral mixture and salt. ◆ Hay feeding is recommended.
Yak			<ul style="list-style-type: none"> ◆ Feeding of concentrate feed along with mineral mixture and salt. ◆ Hay feeding is recommended. ◆ Trimming of hair is recommended.

Cattle, Sheep and Goat			<ul style="list-style-type: none"> ◆ Farmers are advised to look for heat sign especially during early morning or late evening and ensure breeding of the dairy cattle 12 hr after observation of heat. ◆ Breeding of the sheep/goat should be done 24-30 hr after observation of heat. ◆ Feeding of concentrate feed along with jaggery, mineral mixture and salt. ◆ Periodic application of fly repellents and/or netting of dung pit are recommended.
Cattle			<ul style="list-style-type: none"> ◆ Balanced feeding of dairy animals and allow calf suckling immediately after parturition. Colostrum (first three days milk) feeding to new born calf for first three days of life should be ensured. ◆ Full hand milking should be practiced. ◆ Frequent incomplete milking at interval of 4hrs should be practiced after parturition for minimum 1 week. Afterwards complete milking in a day is recommended.
Poultry		Coccidiosis, Ranikhet disease	<ul style="list-style-type: none"> ◆ 16 hrs of light (natural and electrical) should be provided to adult birds for optimum egg production. ◆ Frequent raking and liming of deep litter materials. ◆ Inclusion of turmeric powder @ 10g/kg feed for prevention of coccidiosis. ◆ Maintenance of brooder temperature for chicks with the help of electrical bulbs for initial one month. ◆ Ranikhet vaccination at 5th day and at 30th day of age. ◆ Calcium/shell grit and multi vitamin supplementation is strongly recommended to optimize egg production. ◆ Spraying of ectoparasiticides viz., deltamethrin/cypermethrin @ 1% v/v

			in water.
Pig	All stages	Swine fever	<ul style="list-style-type: none"> ◆ Keep floor dry to avoid skin diseases. ◆ Weaning is recommended at the age of 8 weeks for crossbreds and 10 weeks for indigenous pigs. ◆ Swine fever vaccine at the age of 8-10 week is recommended. ◆ Critical heat detection in early morning and late evening is recommended. ◆ Feed 5-10% green fodder of their diet.

Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim

Name	Designation	Department
<i>Dr. R. K. Avasthe</i>	Joint Director	Soil Science
<i>Dr. Raghavendra Singh</i>	Senior scientist and Head(I/C)	Agronomy
<i>Dr. Manoj Kumar</i>	SMS	Agronomy
<i>Sh. Boniface Lepcha</i>	SMS	Horticulture
<i>Dr. J.K. Singh</i>	SMS	Plant Breeding
<i>Dr. P. K. Pathak</i>	SMS	Animal science
<i>Sh. Santanu Das</i>	SMS	Agril. Meteorology