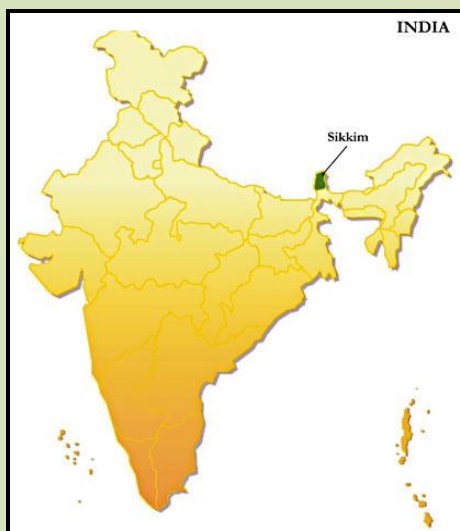




STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 19TH APRIL to 21ST APRIL'2016



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



ISSUED ON TUESDAY 19TH APRIL'2016

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 Gyalshing
- 4) South District with HQ at Namchi

Mangan (PTO)				North Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
15-4-2016	021	25.3	11.5	Rainfall	Light	Light	Moderate	Moderate	Moderate
16-4-2016	014	20.2	12.2	Wind (Speed/ Dir)	2Km/Hr (WNW)	3Km/Hr (SW)	4Km/Hr (SW)	4Km/Hr (SW)	5Km/Hr (SSW)
17-4-2016	000	25.0	11.6	Temperature (Min-Max)	17 - 26°C	16 - 25°C	16 - 24°C	16 - 24°C	16 - 24°C
18-4-2016	035	19.0	12.5	RH (Min-Max)	68 - 88%	70 - 88%	72 - 92%	75 - 92%	70 - 90%

Gangtok				East Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
15-4-2016	027	22.6	12.5	Rainfall	Light	Light	Light	Moderate	Light
16-4-2016	063	18.0	13.4	Wind (Speed/ Dir)	2Km/Hr (WSW)	2Km/Hr (SSE)	3Km/Hr (S)	3Km/Hr (SSE)	3Km/Hr (S)
17-4-2016	002	20.5	13.7	Temperature (Min-Max)	14 - 22°C	14 - 22°C	14 - 21°C	14 - 21°C	14 - 22°C
18-4-2016	009	20.1	14.8	RH (Min-Max)	65 - 90%	65 - 88%	75 - 95%	78 - 92%	70 - 90%

Namthang				South Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
15-4-2016	001	26.5	14.5	Rainfall	No rain	Very Light	Light	Light	No rain
16-4-2016	000	23.0	16.0	Wind (Speed/ Dir)	2Km/Hr (WSW)	2Km/Hr (S)	2Km/Hr (SSW)	3Km/Hr (S)	3Km/Hr (SSW)
17-4-2016	000	25.5	16.5	Temperature (Min-Max)	17 - 27°C	17 - 27°C	16 - 26°C	16 - 25°C	16 - 26°C
18-4-2016	000	27.5	17.5	RH (Min-Max)	58 - 85%	60 - 85%	65 - 90%	70 - 90%	62 - 85%

Gyalshing (AWS)				West Sikkim Forecast					
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
				Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
15-4-2016	010	23.9	12.1	Rainfall	Light	Moderate	Moderate	Moderate	Moderate
16-4-2016	002	19.5	15.0	Wind (Speed/ Dir)	2Km/Hr (W)	3Km/Hr (SE)	3Km/Hr (WSW)	3Km/Hr (WSW)	4Km/Hr (WSW)
17-4-2016	000	21.8	13.8	Temperature (Min-Max)	15 - 24°C	15 - 24°C	14 - 23°C	14 - 23°C	14 - 24°C
18-4-2016	003	23.2	15.2	RH (Min-Max)	65 - 90%	70 - 90%	75 - 92%	75 - 90%	65 - 88%

Part II

AGRO-METEOREOLOGICAL ADVISORIES

General Advisories for all the crops/ livestock

- ❖ Spraying of plant protection biopesticides on bright sunny day for insect and disease management is recommended.
- ❖ Vermicompost pits should be covered with gunny bags / paddy straw/ dry forest litter to regulate the temperature.
- ❖ Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- ❖ FMD Vaccination is strongly recommended for all livestock. Farmers may please contact nearest veterinary hospital/institution/V.O. for the vaccination
- ❖ 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	Pest/ Disease	Agro-Met Advisories
Crops			
Maize	Land preparation / sowing	Cut worm/ Army worm	<ul style="list-style-type: none">❖ 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.❖ Apply dolomite @ 200 kg/ha in furrow before sowing.❖ Seeds should be sown at 50 cm row to row and 20 cm plant to plant spacing, respectively.❖ Take protection measure to save maize seedlings from birds.❖ One hand weeding should be done after 20 days of sowing.❖ Regular monitoring for insect-pest and collection and destruction should be done.❖ Application of mixture of cow urine + water + neem oil (2 litre + 8 litre + 50 ml) @ 100 ml/plant for management of cut worm.❖ For management of Army worm spray spinosad @ 0.3 ml/litre.❖ Proper drainage should be ensured.

Tomato	Transplanting/ vegetative growth		<ul style="list-style-type: none"> ◆ Transplanting should be done under protected condition in small pits either in green house or rain shelter, if no option then in open condition. ◆ Well decomposed FYM along with vermicompost should be added in pits ◆ Spray COC @ 0.25% at 7-10 days interval for management of late blight. ◆ Proper drainage should be ensured.
Red cherry pepper	Transplanting/ vegetative growth		<ul style="list-style-type: none"> ◆ Transplanting should be done in small pits either in rain shelter or in open condition. ◆ Well decomposed FYM @ 0.5 kg along with 50-100 g vermicompost should be added in pits ◆ Spray COC @ 0.25% at 7-10 days interval for management of damping off. ◆ Apply <i>Trichoderma harzianum</i> @ 2.5 kg/50 kg of well decomposed FYM before planting ◆ Proper drainage should be ensured.
Okra Cucurbitaceous crops	Nursery raising/ Sowing		<ul style="list-style-type: none"> ◆ Prepare 4 inch raised bed of 1 m x 5 m size for nursery raising. ◆ Bed should be prepared to a fine tilth by mixing well decomposed FYM @ 2 kg/m² and vermicompost @ 500 g/m² incubated with 2% <i>Trichoderma viride</i> for management of soil borne diseases. ◆ Seed should be sown in line 4-5 cm apart at shallow depth 1-2 cm. ◆ Light irrigation should be provided immediately after seed sowing with rose can. ◆ Proper moisture should be maintained in nursery beds for better germination. ◆ If directly sowing in the well prepared field proper drainage should be ensured
Large cardamom	Flowering		<ul style="list-style-type: none"> ◆ Regular monitoring for pest and disease incidence. ◆ Shade management with the proper lopping of trees.

Ginger	Planting		<ul style="list-style-type: none"> ◆ Healthy rhizomes for planting material should be kept in partial shade for better sprouting. ◆ 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 sowing. ◆ Broadcast dolomite @ 2 t/ha 7-10 days before sowing and mix properly with soil.
Sikkim Mandarin	Flowering/ Fruit set		<ul style="list-style-type: none"> ◆ Tree trunk should be painted with 1% Bordeaux mixture. ◆ Plant basin should be kept weed free. ◆ Proper drainage should be ensured.
Kiwi fruit	Vegetative growth/ Flowering		<ul style="list-style-type: none"> ◆ If possible kiwi fruit vine should be covered with 50% shade net to protect flowers from heavy rain and hail storm ◆ Plant basin should be kept weed free. ◆ Proper drainage should be ensured.
Animal Sciences			
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 after 12 hr of observation of heat. ◆ Breeding of the sheep/goat should be done after 24-30 hr of 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. ◆ 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 indigeneous 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.