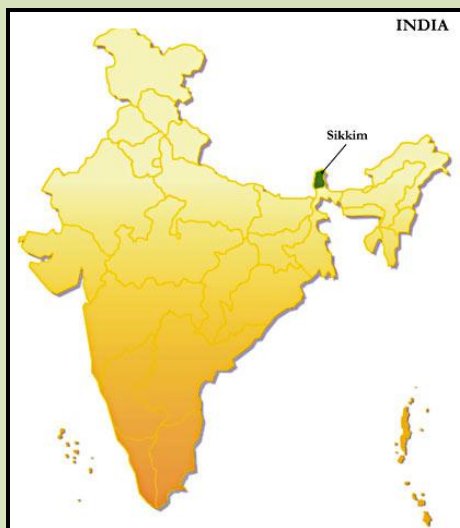




STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 23RD FEBRUARY to 25TH FEBRUARY'2016



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



ISSUED ON TUESDAY 23RD FEBRUARY'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
19/2/2016	000	20.4	10.2	Rainfall	No rain	No rain	No rain	No rain	No rain
20/2/2016	000	20.1	10.1	Wind (Speed/ Dir)	4Km/Hr (S)	4Km/Hr (SSE)	3Km/Hr (NE)	2Km/Hr (SE)	2Km/Hr (NNE)
21/2/2016	000	23.1	10.2	Temperature (Min-Max)	10 - 22°C	10 - 22°C	10 - 22°C	10 - 22°C	10 - 22°C
22/2/2016	000	22.3	10.1	RH (Min-Max)	55 - 85%	60 - 85%	60 - 87%	65 - 90%	64 - 88%

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	Partly Cloudy	Generally Cloudy	Generally Cloudy
19/2/2016	000	16.2	10.6	Rainfall	No rain	No rain	No rain	No rain	No rain
20/2/2016	000	15.0	11.6	Wind (Speed/ Dir)	3Km/Hr (SSE)	2Km/Hr (ESE)	3Km/Hr (NE)	3Km/Hr (ENE)	3Km/Hr (NE)
21/2/2016	001	19.2	11.5	Temperature (Min-Max)	11 - 18°C	11 - 18°C	11 - 18°C	11 - 18°C	11 - 18°C
22/2/2016	000	18.3	10.8	RH (Min-Max)	65 - 85%	60 - 85%	65 - 87%	68 - 90%	66 - 88%

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	Partly Cloudy	Generally Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy
19/2/2016	000	20.5	13.0	Rainfall	No rain	No rain	No rain	No rain	No rain
20/2/2016	000	20.0	14.0	Wind (Speed/ Dir)	4Km/Hr (S)	3Km/Hr (ESE)	2Km/Hr (NE)	2Km/Hr (ENE)	2Km/Hr (NNE)
21/2/2016	000	22.5	13.5	Temperature (Min-Max)	13 - 22°C	13 - 22°C	12 - 21°C	12 - 21°C	11 - 20°C
22/2/2016	000	22.5	13.0	RH (Min-Max)	50 - 80%	52 - 85%	60 - 85%	63 - 88%	60 - 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	Partly Cloudy	Partly Cloudy	Generally Cloudy
19/2/2016	000	16.8	10.9	Rainfall	No rain	No rain	No rain	No rain	No rain
20/2/2016	000	19.0	12.4	Wind (Speed/ Dir)	3Km/Hr (W)	2Km/Hr (ENE)	2Km/Hr (ENE)	3Km/Hr (NNE)	3Km/Hr (NNE)
21/2/2016	000	20.6	12.0	Temperature (Min-Max)	11 - 19°C	11 - 19°C	11 - 19°C	11 - 19°C	11 - 19°C
22/2/2016	N/A	N/A	11.4	RH (Min-Max)	65 - 65%	60 - 85%	62 - 87%	65 - 88%	60 - 85%


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.
- ❖ Mulching should be done through locally available biomass to conserve soil moisture for *rabi* crops.
- ❖ *Jalkund* should be covered with thatch to prevent evaporation losses.
- ❖ 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.
- ❖ 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			
Buckwheat	Flowering /grain filling		❖ Weeding should be done up to 45 days after sowing.
Mustard/ Torla	Flowering/pod filling	Aphid	❖ For management of aphid, spray petroleum agro spray @ 10 ml/l or neem oil (1500ppm) @ 4ml/l.
Vegetable pea/ Field pea	Flowering/Fruiting/Picking		❖ Soil moisture should be maintained for good growth and yield. ❖ If sources are available one irrigation is recommended. ❖ Cautious picking should be done to avoid plant damage.
Tomato	Fruiting/ Nursery raising	Late Blight 	❖ Removal of infected leaves/ plant and drenching/ spray with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1%. ❖ Harvesting of mature green tomato should be done for distant market and pinkish/ reddish for local market. ❖ 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/m ² and vermicompost @ 500

			<p>g/m² incubated with 2% <i>Trichoderma viride</i> for management of soil borne diseases.</p> <ul style="list-style-type: none"> ◆ 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.
Winter vegetables (Cole crops)	Harvesting/ Vegetative		<ul style="list-style-type: none"> ◆ Regular watering and weeding in main field is recommended. ◆ Earthing up and top dressing with vermicompost 40-50 g/plant should be done. ◆ Regular monitoring for pest and disease incidence and collection and destruction of egg, larva, pupa and adult.
Large cardamom	Post harvest crop management		<ul style="list-style-type: none"> ◆ Regular watering should be done at 15 – 30 days intervals. ◆ Regular monitoring for pest and disease incidence. ◆ Shade management with the proper lopping of trees.
Ginger	Storage		<ul style="list-style-type: none"> ◆ Identify healthy plants for seed rhizomes. ◆ Care should be taken during harvesting to avoid the mechanical injury in the rhizome. ◆ Selected rhizomes for planting material should be kept in partial shade for better sprouting. ◆ Forest litter should be collected well in advance as mulching material.
Sikkim Mandarin	Training/ Pruning		<ul style="list-style-type: none"> ◆ Diseased and senile branches should be removed. ◆ Remove all the fruits from trees and the fruits dropped in the basin of tree and the orchard. ◆ Basin maintenance and manuring with FYM @ 30-35 kg/tree should be done. Avoid application of FYM close to the trunk.

Kiwi fruit	Pruning /Training		<ul style="list-style-type: none"> ◆ Diseased and senile branches should be removed. ◆ Pruning should be done retaining 8-10 buds per branch for enhancing new flush and flowering. ◆ Pruned healthy hard wood of pencil thickness size having 4-5 buds can be used as cutting for propagation. ◆ Basin maintenance and manuring with FYM @ 30-35 kg/tree should be done. Avoid application of FYM close to the trunk.
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.
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,	<ul style="list-style-type: none"> ◆ 16 hrs of light (natural and electrical) should be provided to adult birds for

		Ranikhet disease	<p>optimum egg production.</p> <ul style="list-style-type: none"> ◆ 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 crossbreeds 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.