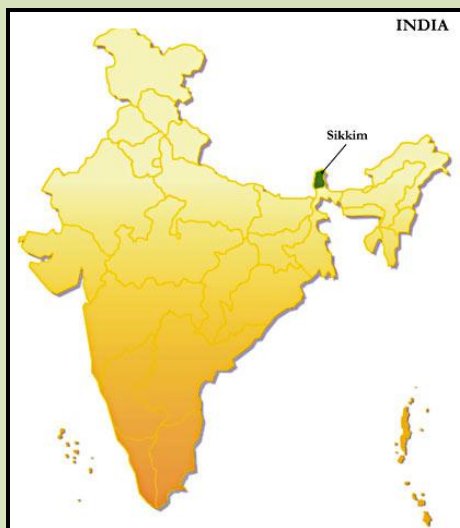




# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 12<sup>TH</sup> FEBRUARY to 15<sup>TH</sup> FEBRUARY'2016



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



**ISSUED ON FRIDAY 12<sup>TH</sup> 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					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Partly Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
9-2-2016	013	20.2	09.1	Wind (Km/Hr) (Speed/ Dir)	4(W)	4(W)	4(W)	3(WSW)	3(WSW)
10-2-2016	000	18.1	09.3	Temperature (Min-Max)	9 - 19°C	9 - 19°C	9 - 19°C	9 - 20°C	9 - 19°C
11-2-2016	000	18.2	09.2	RH (Min- Max)	50 - 82%	55 - 85%	55 - 82%	50 - 80%	55 - 85%

Gangtok				East Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Partly Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
9-2-2016	007	13.3	06.4	Wind (Km/Hr) (Speed/ Dir)	3(NW)	4(NW)	3(NW)	2(NW)	2(NW)
10-2-2016	000	12.7	07.5	Temperature (Min-Max)	6 - 14°C	6 - 13°C	6 - 14°C	7 - 14°C	7 - 13°C
11-2-2016	001	14.4	07.7	RH (Min- Max)	55 - 80%	50 - 82%	55 - 84%	55 - 80%	62 - 85%

Namthang				South Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Partly Cloudy	Partly Cloudy	Partly Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
9-2-2016	000	17.0	08.0	Wind (Km/Hr) (Speed/ Dir)	4(WNW)	4(WNW)	3(WNW)	3(WNW)	2(WNW)
10-2-2016	000	19.0	07.5	Temperature (Min-Max)	8 - 19°C	8 - 19°C	8 - 20°C	8 - 20°C	8 - 19°C
11-2-2016	000	21.5	10.0	RH (Min- Max)	48 - 79%	52 - 82%	50 - 82%	55 - 80%	60 - 85%



Gyalshing (AWS)				West Sikkim Forecast					
				Day → Parameter ↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall (mm)	Max. Temp (°C)	Min. Temp (°C)	Sky Condition	Partly Cloudy	Partly Cloudy	Partly Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
9-2-2016	005	15.5	05.3	Wind (Km/Hr) (Speed/ Dir)	3(WSW)	3(W)	3(W)	2(W)	2(W)
10-2-2016	000	16.2	08.5	Temperature (Min-Max)	6 - 17°C	7 - 18°C	7 - 18°C	7 - 17°C	7 - 17°C
11-2-2016	000	N/A	08.4	RH (Min- Max)	50 - 82%	55 - 80%	50 - 82%	55 - 82%	60 - 87%


## 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
<b>Crops</b>			
Buckwheat	Flowering /grain filling		❖ Weeding should be done up to 45 days after sowing.
Mustard/ Torina	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

			<p>by mixing well decomposed FYM @ 2 kg/m<sup>2</sup> and vermicompost @ 500 g/m<sup>2</sup> incubated with 2% <i>Trichoderma viride</i> for management of soil borne diseases.</p> <ul style="list-style-type: none"> <li>◆ Seed should be sown in line 4-5 cm apart at shallow depth 1-2 cm.</li> <li>◆ Light irrigation should be provided immediately after seed sowing with rose can.</li> <li>◆ Proper moisture should be maintained in nursery beds for better germination.</li> </ul>
Winter vegetables (Cole crops)	Harvesting/ Vegetative		<ul style="list-style-type: none"> <li>◆ Regular watering and weeding in main field is recommended.</li> <li>◆ Earthing up and top dressing with vermicompost 40-50 g/plant should be done.</li> <li>◆ Regular monitoring for pest and disease incidence and collection and destruction of egg, larva, pupa and adult.</li> </ul>
Large cardamom	Post harvest crop management		<ul style="list-style-type: none"> <li>◆ Regular watering should be done at 15 – 30 days intervals.</li> <li>◆ Regular monitoring for pest and disease incidence.</li> <li>◆ Shade management with the proper lopping of trees.</li> </ul>
Ginger	Storage		<ul style="list-style-type: none"> <li>◆ Identify healthy plants for seed rhizomes.</li> <li>◆ Care should be taken during harvesting to avoid the mechanical injury in the rhizome.</li> <li>◆ Selected rhizomes for planting material should be kept in partial shade for better sprouting.</li> <li>◆ Forest litter should be collected well in advance as mulching material.</li> </ul>
Sikkim Mandarin	Training/ Pruning		<ul style="list-style-type: none"> <li>◆ Diseased and senile branches should be removed.</li> <li>◆ Remove all the fruits from trees and the fruits dropped in the basin of tree and the orchard.</li> <li>◆ Basin maintenance and manuring with FYM @ 30-35 kg/tree should be done. Avoid application of FYM close to the</li> </ul>

			trunk.
Kiwi fruit	Pruning /Training		<ul style="list-style-type: none"> <li>◆ Diseased and senile branches should be removed.</li> <li>◆ Pruning should be done retaining 8-10 buds per branch for enhancing new flush and flowering.</li> <li>◆ Pruned healthy hard wood of pencil thickness size having 4-5 buds can be used as cutting for propagation.</li> <li>◆ Basin maintenance and manuring with FYM @ 30-35 kg/tree should be done. Avoid application of FYM close to the trunk.</li> </ul>
<b>Animal Sciences</b>			
Tibetan Sheep			<ul style="list-style-type: none"> <li>◆ Feeding of concentrate feed along with mineral mixture and salt.</li> <li>◆ Hay feeding is recommended.</li> </ul>
Yak			<ul style="list-style-type: none"> <li>◆ Feeding of concentrate feed along with mineral mixture and salt.</li> <li>◆ Hay feeding is recommended.</li> </ul>
Cattle, Sheep and Goat			<ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ Breeding of the sheep/goat should be done after 24-30 hr of observation of heat.</li> <li>◆ Feeding of concentrate feed along with jaggery, mineral mixture and salt.</li> <li>◆ Periodic application of fly repellents and/or netting of dung pit are recommended.</li> </ul>
Cattle			<ul style="list-style-type: none"> <li>◆ Balanced feeding of dairy animals and allow calf suckling immediately after parturition.</li> <li>◆ Full hand milking should be practiced.</li> <li>◆ Frequent incomplete milking at interval of 4hrs should be practiced after parturition for minimum 1 week. Afterwards complete milking in a day is recommended.</li> </ul>

Poultry		Coccidiosis, Ranikhet disease	<ul style="list-style-type: none"> <li>◆ 16 hrs of light (natural and electrical) should be provided to adult birds for optimum egg production.</li> <li>◆ Frequent raking and liming of deep litter materials.</li> <li>◆ Inclusion of turmeric powder @ 10g/kg feed for prevention of coccidiosis.</li> <li>◆ Maintenance of brooder temperature for chicks with the help of electrical bulbs for initial one month.</li> <li>◆ Ranikhet vaccination at 5<sup>th</sup> day and at 30<sup>th</sup> day of age.</li> <li>◆ Calcium/shell grit and multi vitamin supplementation is strongly recommended to optimize egg production.</li> <li>◆ Spraying of ectoparasiticides viz., deltamethrin/cypermethrin @ 1% v/v in water.</li> </ul>
Pig	All stages	Swine fever	<ul style="list-style-type: none"> <li>◆ Keep floor dry to avoid skin diseases.</li> <li>◆ Weaning is recommended at the age of 8 weeks for crossbreeds and 10 weeks for indigenous pigs.</li> <li>◆ Swine fever vaccine at the age of 8-10 week is recommended.</li> <li>◆ Critical heat detection in early morning and late evening is recommended.</li> <li>◆ Feed 5-10% green fodder of their diet.</li> </ul>