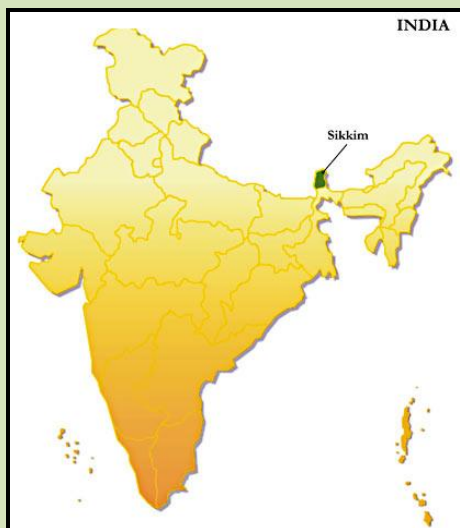




# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 20<sup>TH</sup> JANUARY TO 23<sup>TH</sup> JANUARY'2017



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



**ISSUED ON FRIDAY 20<sup>TH</sup> JANUARY'2017**

## **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	Mainly Clear	Mainly Clear	Generally Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
17-1-2017	000	14.3	06.5	Wind (Km/Hr) (Speed/ Dir)	3(WSW)	2(WSW)	3(SW)	2(WSW)	3(W)
18-1-2017	000	15.3	07.4	Temperature (Min-Max)	7 - 16°C	7 - 16°C	6 - 15°C	6 - 15°C	6 - 16°C
19-1-2017	000	15.2	07.6	RH (Min- Max)	52 - 80%	50 - 79%	54 - 82%	56 - 80%	52 - 78%

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	Mainly Clear	Mainly Clear	Generally Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
17-1-2017	000	12.9	04.1	Wind (Km/Hr) (Speed/ Dir)	2(W)	2(WNW)	3(W)	3(WNW)	3(WNW)
18-1-2017	000	13.8	04.8	Temperature (Min-Max)	6 - 15°C	6 - 15°C	5 - 14°C	5 - 14°C	6 - 14°C
19-1-2017	000	15.3	05.6	RH (Min- Max)	48 - 78%	46 - 77%	50 - 79%	51 - 80%	48 - 78%

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	Mainly Clear	Mainly Clear	Partly Cloudy	Partly Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
17-1-2017	000	15.0	05.0	Wind (Km/Hr) (Speed/ Dir)	2(W)	2(W)	3(WSW)	3(W)	3(W)
18-1-2017	000	16.0	05.5	Temperature (Min-Max)	6 - 15°C	6 - 15°C	5 - 14°C	5 - 14°C	6 - 15°C
19-1-2017	000	15.5	06.0	RH (Min- Max)	49 - 78%	50 - 80%	51 - 81%	52 - 82%	48 - 80%

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	Mainly Clear	Mainly Clear	Partly Cloudy	Generally Cloudy	Generally Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
17-1-2017	N/A	N/A	N/A	Wind (Km/Hr) (Speed/ Dir)	2(WSW)	2(WSW)	3(SSW)	3(WSW)	3(W)
18-1-2017	N/A	N/A	N/A	Temperature (Min-Max)	6 - 15°C	6 - 15°C	5 - 14°C	5 - 14°C	6 - 15°C
19-1-2017	N/A	N/A	N/A	RH (Min- Max)	50 - 76%	48 - 78%	50 - 79%	51 - 78%	48 - 77%



## **Part II**


### **AGRO-METEOREOLOGICAL ADVISORIES**

#### **General Advisories for all the crops**

- Conservation of soil moisture through locally available biomass mulching in all the crops.
- Preventive spray and soil drenching with copper oxychloride @2.5 g/l of water at weekly intervals.
- Spraying of plant protection biopesticides in the evening. Sowing/transplanting of Rabi vegetable crops like cole crops, pea, leafy vegetable etc. and fodder crops (oat/berseem).
- Utilization of harvested water stored in various structures like Jalkund is recommended through drip and sprinkler irrigation system for cultivation of Rabi crops.
- Incorporate organic sources of nutrients (FYM, Vermicompost, Poultry manure, Pig manure, Goat/ Sheep manure, Mixed compost, Neem cake etc.) in to the soil for cultivation of all Rabi crops.
- 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		◆ Regular monitoring of crop.
Mustard/ Torina	Thinning/ weeding/Floweri ng	Aphid	◆ Thinning (removal of extra plants) and weeding should be done 10-15 days after sowing. ◆ One irrigation should be provided at the time of pre-flowering. ◆ For management of aphid, spray petroleum agro spray @ 10 ml/l or neem oil (1500ppm) @ 4ml/l.

Garden pea	Flowering/Fruiting/Picking		<ul style="list-style-type: none"> <li>◆ Soil moisture should be maintained for good growth and yield.</li> <li>◆ If sources are available one irrigation is recommended.</li> <li>◆ Cautious picking should be done to avoid plant damage.</li> </ul>
Tomato	Fruit setting/harvesting	Late Blight 	<ul style="list-style-type: none"> <li>◆ Removal of infected leaves/ plant and drenching/ spray with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1%.</li> <li>◆ Harvesting of mature green tomato should be done for distant market and pinkish/ reddish for local market.</li> </ul>
Potato	Vegetative	Late blight of potato	<ul style="list-style-type: none"> <li>◆ Removal of diseased leaves and branches and weekly spraying of copper oxychloride @ 0.25% for the management of late blight disease</li> </ul>
Winter vegetables (Cole crops)	Vegetative		<ul style="list-style-type: none"> <li>◆ Regular watering and weeding in main field is recommended.</li> <li>◆ Regular monitoring for pest and disease incidence and collection and destruction of egg, larva, pupa and adult.</li> <li>◆ Application of Neem cake/ mustard oil cake @ 50kg/1000sqm.</li> <li>◆ Drenching of plant with mixture of water, cow urine and Neem oil 8 litre, 2 litre and 50 ml, respectively at weekly interval to avoid red ant and cut worms.</li> <li>◆ Earthing up for early transplanted crop is recommended.</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	Harvesting Seed		<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> </ul>

Sikkim Mandarin	Harvesting/Storage		<ul style="list-style-type: none"> <li>◆ Collection of infested dropped fruit and buried in to soil.</li> <li>◆ Harvesting should be done along with twig with two leaves.</li> <li>◆ Diseased and senile branches should be removed.</li> <li>◆ On tree storage should be done for prolonged harvesting of fruits.</li> <li>◆ Manuring with FYM @ 10-15 kg/plant should be done.</li> </ul>
Kiwi fruit	Dormant		<ul style="list-style-type: none"> <li>◆ Pruning of unwanted vegetative growth should be done.</li> <li>◆ Manuring with FYM @ 10-15 kg/plant should be done.</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 animal after 12 hr of 1<sup>st</sup> heat observe.</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</li> </ul>

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