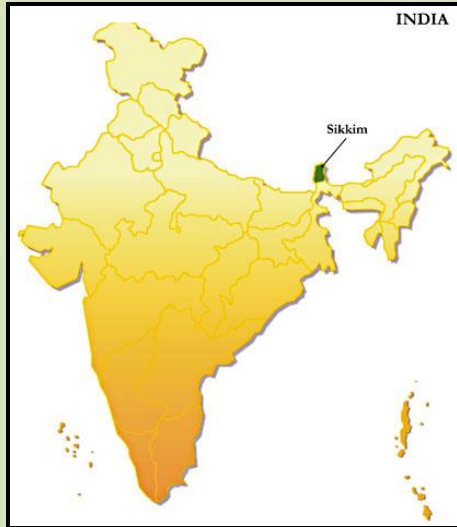




# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 21<sup>st</sup> JULY TO 24<sup>th</sup> JULY'2017



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



**ISSUED ON FRIDAY 21<sup>st</sup> JULY'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	Cloudy	Generally Cloudy	Cloudy	Generally Cloudy	Cloudy
				Rainfall	Moderate	Light	Light	Light	Moderate
18-7-2017	012	29.5	18.6	Wind (Km/Hr) (Speed/ Dir)	2(SSE)	3(SSW)	2(S)	2(S)	2(SSE)
19-7-2017	028	28.3	19.2	Temperature (Min-Max)	17 - 26°C	17 - 27°C	17 - 28°C	17 - 27°C	17 - 27°C
20-7-2017	018	27.1	18.4	RH (Min- Max)	80 - 92%	77 - 90%	79 - 90%	77 - 89%	80 - 91%

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	Cloudy	Cloudy	Generally Cloudy	Generally Cloudy	Cloudy
				Rainfall	Moderate	Light	Light	Light	Moderate
18-7-2017	007	26.4	18.2	Wind (Km/Hr) (Speed/ Dir)	2(ENE)	3(E)	3(ENE)	2(ENE)	2(ENE)
19-7-2017	001	22.3	19.0	Temperature (Min-Max)	18 - 20°C	17 - 21°C	18 - 22°C	18 - 21°C	18 - 21°C
20-7-2017	082	20.4	17.3	RH (Min- Max)	82 - 96%	81 - 94%	80 - 92%	80 - 92%	81 - 93%

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	Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Cloudy
				Rainfall	Moderate	Light	Light	Light	Moderate
18-7-2017	000	25.5	20.0	Wind (Km/Hr) (Speed/ Dir)	2(E)	3(ESE)	3(E)	2(E)	2(E)
19-7-2017	000	27.5	22.0	Temperature (Min-Max)	19 - 25°C	20 - 26°C	20 - 27°C	19 - 26°C	19 - 25°C
20-7-2017	004	26.0	20.0	RH (Min- Max)	82 - 94%	79 - 93%	80 - 91%	81 - 92%	82 - 91%

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	Cloudy	Cloudy	Generally Cloudy	Generally Cloudy	Cloudy
				Rainfall	Moderate	Light	Light	Moderate	Moderate
18-7-2017	N/A	N/A	N/A	Wind (Km/Hr) (Speed/ Dir)	3(ESE)	2(ESE)	2(ESE)	2(E)	3(E)
19-7-2017	N/A	N/A	N/A	Temperature (Min-Max)	19 - 21°C	18 - 22°C	19 - 23°C	19 - 22°C	18 - 22°C
20-7-2017	N/A	N/A	N/A	RH (Min- Max)	81 - 93%	80 - 91%	78 - 90%	80 - 91%	81 - 92%


Heavy rain is likely to occur at isolated places over the state during Day1(21.07.2017) .


## Part II




### AGRO-METEOROLOGICAL ADVISORIES

#### General Advisories for all the crops/ livestock

- ☘ Spraying of plant protection bio-pesticides 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.
- ☘ De-worming with Fenbendazole @ 10 mg / kg body weight.
- ☘ Protect animals from rain and thunders by providing protective cover/ housing.
- ☘ Vaccination of the cattle, goat, yak and sheep should be done against FMD, HS and BQ.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
<b>Crops</b>			
Maize	Knee High stage		<ul style="list-style-type: none"><li>◆ Hand weeding should be done after 45 days of sowing.</li><li>◆ Regular monitoring for insect-pest and collection and destruction should be done.</li><li>◆ For management of Army worm/ stem borer spray spinosad @ 0.3 ml/litre.</li><li>◆ Proper drainage should be ensured.</li></ul>
Okra	Vegetative growth		<ul style="list-style-type: none"><li>◆ Hand weeding should be done after 45 days of</li></ul>

			<p>sowing.</p> <ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> </ul>
Cucurbits	Transplanting/ vegetative growth		<ul style="list-style-type: none"> <li>◆ Bed should be prepared to a fine tilth by mixing well decomposed FYM @ 2 kg/m<sup>2</sup> and vermicompost @ 500 g/m<sup>2</sup> incubated with 5-10 % <i>Trichoderma viride</i> for management of soil borne diseases.</li> <li>◆ About 15-20 cm (25-30 days) seedlings should be transplanted in small pits at spacing of 100 cm x 100 cm.</li> <li>◆ For management of semi looper spray spinosad @ 0.3 ml/litre.</li> <li>◆ Proper drainage should be ensured.</li> </ul>
Tomato/ Red cherry pepper	vegetative growth		<ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> <li>◆ Regular monitoring of field for blight incidence.</li> <li>◆ Preventive spray of copper oxychloride @ 2 g/ litre.</li> <li>◆ For management of cut worm in cherry pepper spray neem based bio pesticide @ 7 ml/litre.</li> <li>◆ Plant staking should be done with bamboo stick/ plastic string.</li> </ul>

Large cardamom	Flowering		<ul style="list-style-type: none"> <li>◆ Manuring with FYM mixed with bio fertilizer @ 2 kg/clump is recommended.</li> <li>◆ Regular weeding should be done.</li> <li>◆ Regular monitoring for pest and disease incidence.</li> <li>◆ Shade management with the proper lopping of trees.</li> </ul>
Ginger/ Turmeric	Vegetative growth		<ul style="list-style-type: none"> <li>◆ Forest litter @ 1 kg/ sqm should be applied as mulch material.</li> <li>◆ Proper drainage should be ensured.</li> </ul>
Sikkim Mandarin	Fruit set		<ul style="list-style-type: none"> <li>◆ Proper drainage should be ensured.</li> <li>◆ Intercropping of ginger, turmeric and maize should be avoided.</li> <li>◆ Preventive spray of copper oxychloride @ 2 g/ litre and neem formulations @ 5 ml/litre for disease and pest management, respectively.</li> </ul>
Kiwi fruit	Flowering/ fruit set		<ul style="list-style-type: none"> <li>◆ Mounting of hail net/ Agro shade net 50% on the trees to avoid plant damage from hails /heavy rainfall.</li> <li>◆ Hand pollination should be done for proper fruit set.</li> <li>◆ Proper drainage should be ensured.</li> </ul>

Tibetan Sheep			<ul style="list-style-type: none"> <li>◆ Feeding of 200 g concentrate feed along with mineral mixture and salt.</li> <li>◆ Shearing of sheep should be ensured before onset of heavy rainfall.</li> </ul>
Yak			<ul style="list-style-type: none"> <li>◆ Trimming of coarse fiber should be ensured before onset of heavy rainfall.</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 @ 3 kg / cattle as maintenance and @ 1 kg /2.5 liter milk production as production ration over and above the maintenance ration.</li> <li>◆ Allow calf suckling immediately after parturition.</li> <li>◆ Full hand milking should be practiced.</li> </ul>

			<ul style="list-style-type: none"> <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>◆ Vaccinate the chicks against ND / RD at 5- 7 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 crossbreds and 10 weeks for</li> </ul>



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.