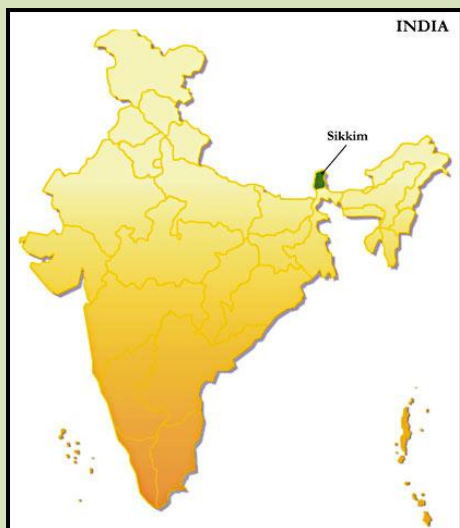


**STATE COMPOSITE AGRO-MET ADVISORY  
BULLETIN FOR THE STATE OF SIKKIM  
PERIOD: 25<sup>TH</sup> AUGUST'2015 to 27<sup>TH</sup> AUGUST'2015**

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



**ISSUED ON TUESDAY 25<sup>TH</sup> AUGUST'2015**

**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 Gyalsing
- 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	Generally Cloudy	Cloudy	Generally Cloudy	Generally Cloudy
21/8/2015	004	25.0	16.4	Rainfall	Moderate	Moderate	Moderate	Moderate	Moderate
22/8/2015	023	25.1	17.2	Wind (Speed/ Dir)	2Km/Hr (SSW)	3Km/Hr (SSW)	3Km/Hr (SSW)	3Km/Hr (S)	3Km/Hr (SSW)
23/8/2015	021	25.4	17.5	Temperature (Min-Max)	18 - 28°C	18 - 28°C	18 - 27°C	18 - 27°C	18 - 28°C
24/8/2015	001	30.1	16.3	RH (Min-Max)	70 - 84%	70 - 87%	73 - 92%	76 - 85%	71 - 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	Cloudy	Generally Cloudy	Generally Cloudy
21/8/2015	030	20.0	17.5	Rainfall	Moderate	Moderate	Moderate	Moderate	Light
22/8/2015	010	20.0	17.2	Wind (Speed/ Dir)	2Km/Hr (SSE)	2Km/Hr (SE)	2Km/Hr (SE)	2Km/Hr (SSE)	2Km/Hr (SE)
23/8/2015	044	21.3	17.0	Temperature (Min-Max)	18 - 23°C	18 - 23°C	18 - 22°C	18 - 23°C	18 - 23°C
24/8/2015	010	22.3	17.9	RH (Min-Max)	82 - 94%	83 - 93%	85 - 95%	85 - 92%	82 - 92%

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	Generally Cloudy	Cloudy	Generally Cloudy	Generally Cloudy
21/8/2015	011	25.0	19.5	Rainfall	Moderate	Moderate	Moderate	Moderate	Moderate
22/8/2015	002	26.0	19.0	Wind (Speed/ Dir)	2Km/Hr (SSE)	2Km/Hr (SSE)	2Km/Hr (SSE)	3Km/Hr (SSE)	2Km/Hr (SSE)
23/8/2015	002	28.0	20.0	Temperature (Min-Max)	20 - 28°C	20 - 28°C	19 - 27°C	19 - 27°C	19 - 28°C
24/8/2015	001	28.5	21.0	RH (Min-Max)	77 - 88%	76 - 88%	78 - 92%	80 - 89%	80 - 91%



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	Cloudy	Cloudy	Generally Cloudy
21/8/2015	009	23.1	17.4	Rainfall	Moderate	Moderate	Moderate	Moderate	Moderate
22/8/2015	003	24.6	17.7	Wind (Speed/ Dir)	2Km/Hr (S)	2Km/Hr (SSE)	2Km/Hr (SSE)	2Km/Hr (S)	2Km/Hr (SSE)
23/8/2015	017	24.2	N/A	Temperature (Min-Max)	18 - 26°C	18 - 27°C	18 - 26°C	18 - 26°C	18 - 26°C
24/8/2015	005	N/A	N/A	RH (Min-Max)	78 - 90%	80 - 90%	83 - 94%	78 - 92%	75 - 91%


## **Part II**




### **AGRO-METEOROLOGICAL ADVISORIES**

- Preventive spray and soil drenching with copper oxychloride @2.5 g/l of water at 7-10 days intervals.
- Spraying of plant protection biopesticides on bright sunny day.
- Ensure proper drainage to avoid water logging especially for ginger, turmeric and kharif vegetables.
- Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- De-worming with Fenbendazole @ 10 mg / kg body weight.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
<b>Crops</b>			
Maize	Harvesting		<ul style="list-style-type: none"><li>◆ Harvesting of maize for green cobs should be done in the morning hours.</li><li>◆ After harvest of green cobs, stover may be used as livestock fodder.</li><li>◆ Maintain proper drainage for maize crop being grown for grain and seed purpose.</li></ul>
Rice	Direct sowing/ Transplanting		<ul style="list-style-type: none"><li>◆ Land should be prepared for direct sowing/transplanting.</li><li>◆ Proper maintenance of field channel and bunds are necessary to utilize the rain water.</li><li>◆ Well decomposed FYM/poultry manure/ vermicompost or other available organic sources of nutrients may be broadcast and incorporated by ploughing.</li><li>◆ Maintain proper spacing of 20 x 15 cm for conventional rice and 20 x 20 cm under modified SRI.</li><li>◆ Weeding should be done where crop is in vegetative stage (20-25 days after planting).</li><li>◆ Uprooted weeds may be left in between rows to decompose in standing flood water. Weeds may be incorporated into the soil under SRI.</li></ul>

Rice bean	Vegetative stage	Blister Beetle  Legume pod borer	<ul style="list-style-type: none"> <li>◆ Proper staking should be done.</li> <li>◆ Collection and destruction of Blister beetles and spraying of Neem oil @3ml/lit should be done.</li> </ul>
Soybean	Vegetative/ Flowering		<ul style="list-style-type: none"> <li>◆ Weeding should be done.</li> <li>◆ Maintain optimum plant population.</li> </ul>
Black gram	Sowing/ vegetative	Blister Beetle 	<ul style="list-style-type: none"> <li>◆ Well decomposed FYM @ 5 t/ha or vermicompost @ 1 t/ha and dolomite @ 2 t/ha should be incorporated in the soil at the time last ploughing.</li> <li>◆ To avoid water logging proper drainage should be maintained.</li> <li>◆ Before sowing seed should be inoculated with <i>Rhizobium</i> culture @ 20 g/kg seed.</li> <li>◆ Timely sowing on ridges is recommended.</li> <li>◆ Collection and destruction of Blister beetles and spraying of Neem oil @3ml/lit should be done.</li> </ul>
Finger Millet	Transplanting/ vegetative		<ul style="list-style-type: none"> <li>◆ Land should be prepared for raising of finger millet nursery /transplanting.</li> <li>◆ Proper maintenance of field channel and bunds are necessary to utilize the rain water.</li> <li>◆ Well decomposed FYM/poultry manure/ vermicompost or other available organic sources of nutrients may be broadcast and incorporated by ploughing.</li> <li>◆ First weeding should be done upto 30 days after transplanting.</li> <li>◆ Maintain optimum plant population (20x15cm) for higher yield.</li> </ul>
Tomato	Flowering/ fruiting	Late Blight	<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained.</li> <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</li> </ul>

			should be done for distant market and pinkish/ reddish for local market.
Gourds (Bottle/ bitter/ sponge/ ridge)	Flowering/ fruiting	Fruit fly	<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained.</li> <li>◆ Collection and destruction of infested fruit.</li> <li>◆ Installation of para pheromone trap (cue lure) @ 16-20 traps/ha.</li> <li>◆ Regular harvesting should be done to improve the yield.</li> </ul>
Dalley chilli/ Red Cherry pepper	Flowering/ fruiting	Fruit fly	<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained.</li> <li>◆ Collection and destruction of infested fruit.</li> <li>◆ Installation of para pheromone trap (cue lure) @ 16-20 traps/ha.</li> <li>◆ Regular harvesting should be done to improve the yield.</li> </ul>
Large cardamom	Vegetative/ floral bud formation		<ul style="list-style-type: none"> <li>◆ Planting of disease free sucker should be done.</li> <li>◆ Apply well decomposed FYM @ 2kg/ vermicompost @ 200g and neem cake @ 150g per clump.</li> <li>◆ Removal and burying of blight infected leaves.</li> <li>◆ Weeding/ removal of infected tillers should be done.</li> <li>◆ Removal of infected leaves/ plant and spray with copper oxychloride @ 0.25 %.</li> </ul>
Ginger	Vegetative	Soft rot	<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained.</li> <li>◆ Weeding and second mulching is recommended.</li> <li>◆ Removal of infected leaves/ plant and drenching/ spray with copper oxychloride @ 0.25 %.</li> </ul>
Okra	Vegetative/ flowering		<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained.</li> <li>◆ Regular weeding should be done and followed by earthing up.</li> </ul>

Sikkim Mandarin	Vegetative / active fruit growth	Scab	<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained to avoid water stagnation.</li> <li>◆ Basin should be weed free.</li> <li>◆ Avoid FYM application near the tree trunk.</li> <li>◆ To fertilize the crop, well decomposed FYM @ 10-20kg /plant should be applied in the basin of trees.</li> <li>◆ Removal of scab infected leaves and spray copper oxychloride @ 0.25 %.</li> <li>◆ Spray of petroleum oil based agro spray @ 10ml/l for the management of aphid and leaf miner.</li> <li>◆ Regular monitoring for trunk borer infestation.</li> </ul>
			
		Leaf miner 	
		Aphid 	
Kiwifruit	Vegetative / active fruit growth		<ul style="list-style-type: none"> <li>◆ Proper drainage should be maintained to avoid water stagnation.</li> <li>◆ Basin should be weed free.</li> <li>◆ Avoid FYM application near the tree trunk.</li> <li>◆ To fertilize the crop, well decomposed FYM @ 10-20kg /plant should be applied in the basin of trees.</li> <li>◆ Preventive spray of copper oxychloride @ 0.25 % and petroleum oil based agro spray @ 10 ml/l.</li> </ul>

### Animal Sciences

Tibetan Sheep	Full wool grown		<ul style="list-style-type: none"> <li>◆ Shearing is recommended on bright sunny day.</li> <li>◆ Spraying of ectoparasiticide.</li> </ul>
Yak	Full grown hair		<ul style="list-style-type: none"> <li>◆ Trimming of full grown coarse hair is recommended.</li> <li>◆ Feeding of concentrate feed along with mineral mixture and salt.</li> <li>◆ Spraying of ectoparasiticide.</li> </ul>
Cattle, Sheep and Goat	All stages		<ul style="list-style-type: none"> <li>◆ Chances of coming into estrus so farmers are advised to look for heat sign especially during early morning or late evening and ensure breeding</li> </ul>

			<p>of the animal after 12 hr of 1<sup>st</sup> heat observe.</p> <ul style="list-style-type: none"> <li>◆ Feeding of colostrums within 2 hrs of birth.</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 is recommended.</li> </ul>
Poultry	All stages	Coccidiosis	<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 and multi vitamin supplementation is strongly recommended to optimize egg production.</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> </ul>