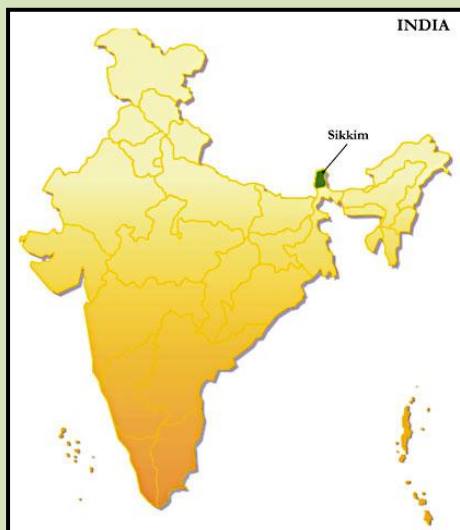




# STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 10<sup>th</sup> to 13<sup>th</sup> JULY 2015



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



**ISSUED ON “FRIDAY 10<sup>TH</sup> JULY 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					
				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	Rather Heavy	Moderate	Moderate	Moderate	Moderate
7-7-2015	022	25.2	17.4	Wind (Km/Hr) (Speed/ Dir)	2(S)	2(WSW)	2(S)	3(SSW)	3(W)
8-7-2015	016	29.0	17.5	Temperature (Min-Max)	19 - 25°C	19 - 26°C	19 - 27°C	19 - 26°C	19 - 25°C
9-7-2015	009	28.1	20.3	RH (Min-Max)	86 - 94%	83 - 96%	84 - 94%	84 - 94%	86 - 95%

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	Rather Heavy	Moderate	Moderate	Moderate	Rather Heavy
7-7-2015	034	22.0	17.9	Wind (Km/Hr) (Speed/ Dir)	2(S)	2(SSE)	3(SE)	2(SE)	3(SW)
8-7-2015	023	22.6	17.6	Temperature (Min-Max)	18 - 20°C	18 - 21°C	18 - 22°C	18 - 22°C	18 - 21°C
9-7-2015	009	22.3	17.6	RH (Min-Max)	85 - 96%	84 - 96%	85 - 94%	83 - 94%	84 - 95%

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	Cloudy	Generally Cloudy	Cloudy	Cloudy
				Rainfall	Rather Heavy	Moderate	Moderate	Moderate	Rather Heavy
7-7-2015	012	27.5	19.5	Wind (Km/Hr) (Speed/ Dir)	2(S)	2(S)	3(SE)	3(SSE)	2(WSW)
8-7-2015	015	29.5	19.5	Temperature (Min-Max)	20 - 23°C	20 - 24°C	20 - 25°C	20 - 25°C	20 - 24°C
9-7-2015	008	28.0	19.5	RH (Min- Max)	86 - 96%	87 - 95%	84 - 95%	83 - 95%	88 - 96%


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	Rather Heavy	Moderate	Moderate	Moderate	Moderate
7-7-2015	025	25.3	18.0	Wind (Km/Hr) (Speed/ Dir)	2(SE)	2(SSE)	3(SSE)	2(S)	3(NW)
8-7-2015	009	26.1	17.4	Temperature (Min-Max)	18 - 20°C	18 - 21°C	18 - 22°C	18 - 22°C	18 - 21°C
9-7-2015	023	25.2	17.6	RH (Min- Max)	88 - 96%	85 - 94%	84 - 95%	85 - 93%	85 - 95%



## Part II


### AGRO-METEOREOLOGICAL ADVISORIES



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

- ❖ 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.
- ❖ 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	Nursery/Sowing/ Transplanting		<ul style="list-style-type: none"><li>❖ Land should be prepared for raising of rice nursery/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></ul>
Rice bean	Flowering/Grain filling/ Physiological maturity	Blister Beetle 	<ul style="list-style-type: none"><li>❖ Ensure proper drainage to avoid water logging.</li><li>❖ Mature pod should be harvested and kept for sun drying.</li><li>❖ Collection and destruction of Blister beetles and spraying of Neem oil @3ml/lit should be done.</li></ul>

		Legume pod borer	
Soybean	Sowing/ Vegetative stage		<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> </ul>
Black gram/ Green gram	Sowing/ vegetative stage	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	Nursery/ Transplanting		<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> </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		<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> </ul>

		<p>Leaf miner</p>  <p>Aphid</p> 	<ul style="list-style-type: none"> <li>◆ Removal of infected leaves and spray with 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>
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 with 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>◆ Deworming of newly born lambs and ewes should be done with Fenbendazole @ 10mg/kg body weight.</li> </ul>
Yak	Full grown hair		<ul style="list-style-type: none"> <li>◆ Trimming of full grown coarse hair is recommended.</li> <li>◆ Deworming of newly born calves and dams should be done with Fenbendazole @ 10mg/kg body weight.</li> <li>◆ Feeding of concentrate feed along with mineral mixture and salt.</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 of the animal after 12 hr of 1<sup>st</sup> heat observe.</li> </ul>



			<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.</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>

## **Part II**

### **AGRO-METEOREOLOGICAL ADVISORIES**