



STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM PERIOD: 19TH DECEMBER – 22ND DECEMBER 2014



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



ISSUED ON FRIDAY 19TH DECEMBER 2014

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 (AWS)				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	Mainly Clear	Mainly Clear	Partly Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
16-12-2014	000	13.6	10.7	Wind (Km/Hr) (Speed/ Dir)	2(SSW)	1(SSE)	1(SSW)	2(SSW)	2(SSE)
17-12-2014	003	17.7	07.3	Temperature (Min-Max)	7 - 19°C	7 - 19°C	7 - 19°C	7 - 18°C	8 - 18°C
18-12-2014	000	18.3	05.5	RH (Min-Max)	55 - 75%	57 - 75%	60 - 77%	62 - 78%	65 - 82%

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	Mainly Clear	Mainly Clear	Partly Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
16-12-2014	000	11.4	08.8	Wind (Km/Hr) (Speed/ Dir)	2(SE)	1(E)	3(SSE)	2(SSE)	1(ENE)
17-12-2014	003	13.7	05.7	Temperature (Min-Max)	7 - 15°C	7 - 15°C	7 - 14°C	7 - 14°C	7 - 14°C
18-12-2014	000	14.6	05.7	RH (Min-Max)	50 - 70%	50 - 70%	55 - 75%	55 - 75%	62 - 80%

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	Mainly Clear	Mainly Clear	Partly Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
16-12-2014	000	14.0	09.2	Wind (Km/Hr) (Speed/ Dir)	3(SSE)	3(ESE)	5(S)	6(S)	4(E)
17-12-2014	001	15.0	08.5	Temperature (Min-Max)	7 - 18°C	7 - 18°C	7 - 17°C	7 - 17°C	8 - 17°C
18-12-2014	000	17.0	06.5	RH (Min-Max)	50 - 70%	50 - 70%	55 - 72%	55 - 75%	60 - 78%



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	Mainly Clear	Mainly Clear	Partly Cloudy
				Rainfall	No rain	No rain	No rain	No rain	No rain
16-12-2014	000	13.4	08.4	Wind (Km/Hr) (Speed/ Dir)	2(S)	2(SE)	3(WSW)	3(WSW)	2(ENE)
17-12-2014	000	16.8	04.8	Temperature (Min-Max)	6 - 19°C	6 - 18°C	6 - 18°C	6 - 17°C	7 - 17°C
18-12-2014	000	17.3	05.2	RH (Min-Max)	55 - 71%	55 - 72%	57 - 75%	60 - 77%	62 - 80%


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.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
Crops			
Finger millet	Harvesting		<ul style="list-style-type: none"> ❖ Harvesting should be done as earliest during morning hour and store at safer place.
Rapeseed and mustard	Sowing after harvest of rice/ Vegetative stage	White rust  	<ul style="list-style-type: none"> ❖ Thinning to maintain row to row and plant to plant spacing of 30x10 cm, respectively. ❖ One irrigation and mulching with locally available bio resources and one is recommended. ❖ Remove the infected inflorescence.
Buckwheat	Flowering / grain filling		<ul style="list-style-type: none"> ❖ Regular monitoring of crop.

Garden pea	Sowing/ emergence		<ul style="list-style-type: none"> ◆ Sowing of pea to be completed after harvest of rice to benefit from residual moisture and mulching with locally available biomass after emergence is recommended.
Large cardamom	Harvesting		<ul style="list-style-type: none"> ◆ Removal and burying of blight infected leaves. ◆ Application of 500g vermicompost / 2kg well decomposed FYM per clump is recommended. ◆ Two irrigations in a month are recommended. ◆ Field sanitation and removal of unproductive tillers.
Ginger	Harvesting/ Storage		<ul style="list-style-type: none"> ◆ Harvesting should be done at proper stage. ◆ Harvested rhizome should be dried for two weeks under shade condition and stored in cool and dry place for seed material.
Cole crops	Transplanting / Vegetative	Damping off 	<ul style="list-style-type: none"> ◆ Transplanting of seedlings should be done immediately. ◆ Soil application of <i>Trichoderma viride</i>/ <i>Pseudomonas fluorescens</i> @ 2.5 kg mixed with 50kg well decomposed FYM for 1 ha. ◆ Drenching with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1% at 10 days interval for the management of damping off and root rot. ◆ Application of Neem cake/ mustard oil cake @ 50kg/1000sqm. ◆ 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. ◆ Earthing up for early transplanted crop is recommended.

Tomato	Fruit setting/ harvesting	Late blight of tomato	<ul style="list-style-type: none"> Watering should be done at the base of the plant. Removal of diseased leaves and branches and weekly spraying of copper oxychloride @ 0.25% for the management of late blight disease.
Potato	Planting/ vegetative	Late blight of potato	<ul style="list-style-type: none"> Kufri Jyoti, K. Giriraj, K. Sheetman, K. Badshah are recommended varieties. Tubers with two eyes, weighing 40-50 g are ideal for planting. Ridge to ridge spacing of 45 cm and plant to plant distance of 30 cm has to be maintained. FYM @ 10-15 t/ha and Neem cake 500 kg/ ha is recommended. Removal of diseased leaves and branches and weekly spraying of copper oxychloride @ 0.25% for the management of late blight disease.
Sikkim Mandarin	Harvesting		<ul style="list-style-type: none"> Pluck the fruit along with the twig to avoid injury. Harvesting to be done carefully to avoid breakage of productive branches. Collect fallen fruits and destroy to prevent further multiplication of fruit flies. Packing of graded fruits in corrugated fibre boxes cushioned with dry paddy straw to reduce post harvest loss.

Animal Sciences

Tibetan Sheep	Sheared sheep		<ul style="list-style-type: none"> Dipping the animal / spraying with ectoparasitic drug at 3 monthly intervals. Provide winter shelter for lambs.
Yak	Pregnancy	Weight gain	<ul style="list-style-type: none"> Pregnancy diagnosis is recommended. Feeding of concentrate feed along with mineral mixture and salt. Provide winter shelter for calves.
Cattle, Sheep and Goat	All stages		<ul style="list-style-type: none"> Chances of coming into estrus so farmers are advised to look for heat sign especially during early morning

			<p>or late evening and ensure breeding of the animal after 12 hr of 1st heat observe.</p> <ul style="list-style-type: none"> ◆ Feeding of colostrums within 2 hrs of birth. ◆ Feeding of concentrate feed along with mineral mixture and salt. ◆ De-worming with Fenbendazole @ 10 mg / kg body weight.
Poultry	All stages	High humidity	<ul style="list-style-type: none"> ◆ Frequent raking and liming of deep litter materials. ◆ Maintenance of brooder temperature for chicks with the help of electrical bulbs. ◆ Ranikhet vaccination at 5th day and at 30th day of age.
Pig	All stages		<ul style="list-style-type: none"> ◆ Keep floor dry to avoid skin diseases. ◆ De-worming with Fenbendazole @ 10 mg / kg body weight. ◆ Dipping the animal / spraying with ectoparasitic drug at 3 monthly intervals.