

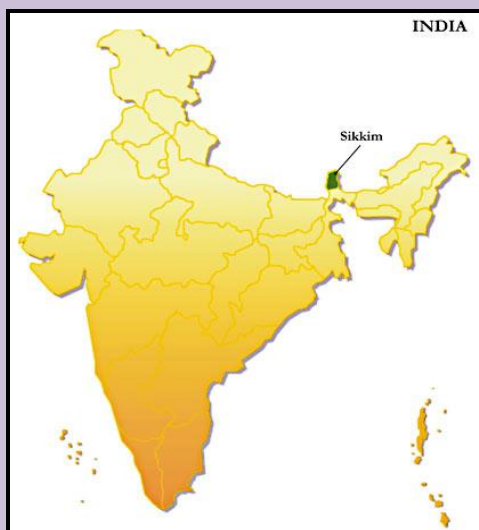


# AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF EAST SIKKIM

**PERIOD:**

**12<sup>th</sup> FEBRUARY to 16<sup>th</sup> FEBRUARY 2020**

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



**ISSUED ON 16<sup>th</sup> February 2020**

## 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

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

## Value Added forecast for EAST-DISTRICT for next five days

↓Parameter/Date→	12/02/2020	13/02/2020	14/02/2020	15/02/2020	16/02/2020
Rainfall (mm)	No rain	No rain	No rain	No rain	No rain
Max Temp ( <sup>0</sup> C)	14	15	15	14	13
Min Temp ( <sup>0</sup> C)	07	07	07	06	06
Sky condition	Generally cloudy	Partially clear	Partially clear	Partially clear	Generally cloudy
Max RH (%)	85	82	83	84	87
Min RH (%)	65	62	63	70	72
Wind Speed (Kmph)	002	002	003	002	003
Wind Direction (deg)	NE	NE	NE	NE	NE

Northerly- **N**, North-Easterly-**N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly-**W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
7-2-2020	000	11.5	04.5
8-2-2020	Trace	12.7	03.9
9-2-2020	000	13.2	04.9

### Weather forecast valid up to 16<sup>th</sup> February 2020

- There is a probability of no rainfall on coming days.
- Max temp may be varying from 14-15°C, whereas, Min temp may vary from 6-7 °C
- Sky will remain generally cloudy.
- Max RH is likely to be 82-87 %, whereas, Min RH may vary from 62-72 %
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from northeasterly
- Weekly cumulative rainfall= 000.0 mm

## AGRO-METEOROLOGICAL ADVISORIES

### General Advisories for all the crops/ livestock

- ✚ Apply irrigation if temperature falls down below 4-5°C.
- ✚ If dry condition prevails on field for longer time, apply water keep the field moist.
- ✚ While selecting site for construction of animal shed a site that allows sun light exposure as well as good wind control is preferable.
- ✚ Suitable soil water conservation technique should be maintained at the field; however, secondary source of irrigation should be available for vegetable crops.
- ✚ सँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पछि।
- ✚ यदि सुख्खा अवस्था लामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जगा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रण हुने हेर्नुस् ।
- ✚ खेती मा पानी संरक्षण गरनुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<b><i>Agricultural and Horticultural crops:</i></b>			
Potato	Vegetative stage		<ul style="list-style-type: none"> <li>■ As a rule, soil must keep wet but hardening or too wet condition must be avoided.</li> <li>■ Irrigate the crop at 30-35 DAS and maintain the available soil moisture (ASM) at about 75 %.</li> <li>■ To protect the potato from chilling injury apply light irrigation on it.</li> <li>■ <b>At 40-45 DAS little hoeing / earthing up should be done.</b></li> <li>■ <b>Infected plants with late blight disease must be destroyed as soon as detected.</b></li> <li>■ Spray Blitox @ 2.5 g/l at 7-10 days interval to control Late blight disease.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ एक नियमको रूपमा, माटो भजेको हुनुपर्दछ तर कडा हँदै छ वा धेरै भजेको अवस्थाबाट टाढा रहनु पर्छ।</li> <li>◆ ३०-३५ दिन बाद बालीमा सँचाइ गर्नुहोस् र उपलब्ध माटोको नम (ASM) लाई ७५% मा कायम राख्नुहोस्।</li> <li>◆ आलुलाई जारोबाट बचाउन यसमा हल्का सँचाइ लगाउनुहोस्।</li> <li>◆ ४०-४५दिनको बाद खेतिमा माटो उठाएर लगाउनु पर्छ।</li> <li>◆ लेटब्लइट रोग सक्रमत हुनु बित्तिकै</li> </ul>

			<p>आल् पत्ता लाई नष्ट गरदौन पदेछ।          लेट ब्लाइट रोग नियन्त्रण गर्न          7-10 दिनको मध्यान्तरमा ब्लिटक्स          @ 2.5 g/l स्प्रे गर्नुहोस्।</p>
Field pea	Pod formation		<ul style="list-style-type: none"> <li>Soil moisture should be maintained for good growth and yield.</li> <li>One or two light and uniform irrigation should be given at flowering and fruiting stage.</li> </ul>
			<ul style="list-style-type: none"> <li>माटोको न म राम्रो बृद्ध र उत्पादनको ला ग कायम गर्नुपर्दछ।</li> <li>एक वा दुई हल्का र एकसमान संचाई फूल र फलफूल चरणमा दिनु पर्छ।</li> </ul>
Rapeseed-Mustard/Toria	Fruiting		<ul style="list-style-type: none"> <li>Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</li> <li>In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</li> <li>For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</li> </ul>
			<ul style="list-style-type: none"> <li>फूल फुल्ने र सलक्वा गठन चरणहरू संचाईको ला ग महत्त्वपूर्ण छ। त्यसोभए फूल-फुल्ने र फल लाग्ने चरणमा दुई संचाई लाभदायक छन्।</li> <li>सक्किमको अवस्थामा मकै को बोट (स्केको) र चामल पराल जस्ता मल चंग सामग्रीहरू माटोको ओस संरक्षण गर्न प्रयोग गर्न सक्न्छ।</li> <li>ए फडको व्यवस्थापनका ला ग, नीमको तेल ( 1500 पीपीएम) @ 4ml म ल / एल स्प्रे गर्नुहोस्</li> </ul>
Cole crops	Head formation		<ul style="list-style-type: none"> <li>During head initiation of and development stages proper moisture level of soil should be maintained.</li> <li>Cole crops should be harvest either on afternoon or early in the morning.</li> <li>Being a shallow crops earthing up must be carried on cole crops.</li> </ul>
			<ul style="list-style-type: none"> <li><b>Avoid stagnant water in the field.</b></li> <li>प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उ चत ओस तह कायम राख्नुपर्दछ।</li> <li>कोल बालीहरू (cabbage, cauliflower and broccoli)या त दिउसो वा बिहान सबेरै उठाउनु पर्छ।</li> <li>हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउनु पर्छ।</li> <li>खेतमा जामेको पानीलाई हटानुश।</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Strict monitoring of crop against attack of late blight.</li> <li>Cover the crop during night to protect from frost.</li> <li>Apply irrigation at the base of plant whenever required.</li> </ul>
			<ul style="list-style-type: none"> <li>लेटब्लइट आक्रमण रोकनको ला ग नियन्त्रण रेख देख गर्नुस्।</li> <li>शीतबाट बचाउन रातमा बालीलाई</li> </ul>

			ढाक्नहोस। ■ आवश्यकता अनुसार बिरुवाको फेदमा सचाई प्रयोग गर्नहोस।
<i>Animal Sciences and livestock management</i>			
Sheep/goat			◆ During winter months special care should be taken for sheep, goat for external parasites.
			◆ जाडो महिनाहरूमा भेडा र बाख्रा हरुलाई परजीवीहरू बाटा ब्याउनु ला ग विशेष ध्यान राख्नु पर्छ।
Poultry/chicken			◆ Keep the Vanaraja chicks in warm condition (32-33°C) during the first four weeks. ◆ Low cost brooder should be made to prevent chick mortality due to cold stress. ◆ Maintain brooding temperature through continuous electricity supply and for emergency Sigiri/Bukhari can be used.
			◆ पहिलो चार हप्ताहरूमा भानाराजा चलाहरू न्यानो अवस्थामा (३२-३३°C) राख्नुहोस ◆ चर्सी तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नको ला ग सस्तो पशु प्पालन गृह बनाउनु पर्छ। ◆ पशु पालन गृह तापमान कायम गर्नको ला ग लगातार बिजुली प्रयोग गर्नस र आपतका लनको ला ग स गरि अथवा बुखारी प्रयोग गर्न स कन्छ।

*Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim*

Name	Designation	Department
<b>Dr. R. K. Avasthe</b>	<b>Joint Director</b>	<b>Soil Science</b>
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology
Miss Tirtha Kumari Chettri	Met. Observer	Biochemistry

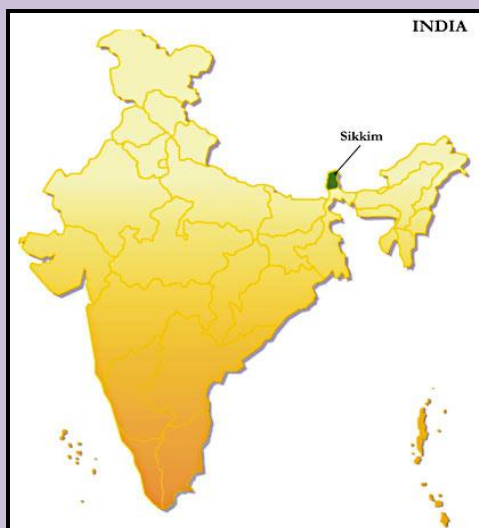


# AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF NORTH SIKKIM

## PERIOD:

**12<sup>th</sup> FEBRUARY to 16<sup>th</sup> FEBRUARY 2020**

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



**ISSUED ON 11<sup>th</sup> February 2020**

### 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

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

### **Value Added forecast for NORTH-DISTRICT for next five days**

<b>↓Parameter/Date→</b>	<b>12/02/2020</b>	<b>13/02/2020</b>	<b>14/02/2020</b>	<b>15/02/2020</b>	<b>16/02/2020</b>
<b>Rainfall (mm)</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>
<b>Max Temp (<sup>0</sup>C)</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>18</b>
<b>Min Temp (<sup>0</sup>C)</b>	<b>08</b>	<b>09</b>	<b>09</b>	<b>08</b>	<b>08</b>
<b>Sky condition</b>	<b>Generally cloudy</b>	<b>Partially clear</b>	<b>Partially clear</b>	<b>Partially clear</b>	<b>Generally cloudy</b>
<b>Max RH (%)</b>	<b>88</b>	<b>85</b>	<b>85</b>	<b>87</b>	<b>90</b>
<b>Min RH (%)</b>	<b>68</b>	<b>64</b>	<b>65</b>	<b>68</b>	<b>70</b>
<b>Wind Speed (Kmph)</b>	<b>004</b>	<b>004</b>	<b>003</b>	<b>003</b>	<b>002</b>
<b>Wind Direction (deg)</b>	<b>SW</b>	<b>SW</b>	<b>S</b>	<b>S</b>	<b>SE</b>

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

#### **Weather for preceding week**

<b>Date</b>	<b>Rainfall</b>	<b>Max. Temp</b>	<b>Min. Temp</b>
	<b>(mm)</b>	<b>(<sup>0</sup>C)</b>	<b>(<sup>0</sup>C)</b>
<b>7-2-2020</b>	<b>000</b>	<b>15.6</b>	<b>07.1</b>
<b>8-2-2020</b>	<b>000</b>	<b>18.2</b>	<b>05.5</b>
<b>9-2-2020</b>	<b>000</b>	<b>18.4</b>	<b>05.8</b>

#### **Weather forecast valid up to 16<sup>th</sup> February 2020**

- Probability of no rainfall coming days.
- Max temp may be varying from 18-19 °C, whereas, Min temp may vary from 8-9°C
- Sky will remain partially clear.
- Max RH is likely to be 85-90 %, whereas, Min RH may vary from 64-70 %
- Wind speed may likely vary from 2-4 km/hr.
- Wind direction may blow from south westerly direction.
- Weekly cumulative rainfall= 000.0 mm.

## AGRO-METEOROLOGICAL ADVISORIES

### General Advisories for all the crops/ livestock

- ✦ Apply irrigation if temperature falls down below 4-5°C.
- ✦ If dry condition prevails on field for longer time, apply water keep the field moist.
- ✦ While selecting site for construction of animal shed a site that allows sun light exposure as well as good wind control is preferable.
- ✦ Suitable soil water conservation technique should be maintained at the field; however, secondary source of irrigation should be available for vegetable crops.
- ✦ सँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पछि।
- ✦ यदि सुख्खा अवस्था लामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चसो राख्नुहोस्।
- ✦ जनावरहरूको निर्माणको लागि जगा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रण हुने हेर्नुस् ।
- ✦ खेती मा पानी संरक्षण गर्नुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<b><i>Agricultural and Horticultural crops:</i></b>			
Potato	Vegetative stage		<ul style="list-style-type: none"> <li>✦ As a rule, soil must keep wet but hardening or too wet condition must be avoided.</li> <li>✦ Irrigate the crop at 30-35 DAS and maintain the available soil moisture (ASM) at about 75 %.</li> <li>✦ To protect the potato from chilling injury apply light irrigation on it.</li> <li>✦ <b>At 40-45 DAS little hoeing / earthing up should be done.</b></li> <li>✦ <b>Infected plants with late blight disease must be destroyed as soon as detected.</b></li> <li>✦ Spray Blitox @ 2.5 g/l at 7-10 days interval to control Late blight disease.</li> </ul>
			<ul style="list-style-type: none"> <li>✦ एक नियमको रूपमा, माटो भजेको हुनुपर्दछ तर कडा हँदै छ वा धेरै भजेको अवस्थाबाट टाढा रहनु पर्छ।</li> <li>✦ ३०-३५ दिन बाद बालीमा सँचाइ गर्नुहोस् र उपलब्ध माटोको नम (ASM) लाई ७५% मा कायम राख्नुहोस्</li> <li>✦ आलुलाई जारोबाट बचाउन यसमा हल्को सँचाई लगाउनुहोस्।</li> <li>✦ ४०-४५दिनको बाद खेतिमा माटो उठाएर लगाउनु पर्छ।</li> <li>✦ लेटब्लइट रोग संक्रमित हुनु बित्तिकै आलु पत्ता लाई नष्ट गरदिनु पर्दछ।</li> </ul>

			<ul style="list-style-type: none"> <li>◆ लेट ब्लाइट रोग नियन्त्रण गर्ने 7-10 दिनको मध्यान्तरमा ब्लिटक्स @ 2.5 g/l स्प्रे गर्नुहोस्।</li> </ul>
Field pea	Pod formation		<ul style="list-style-type: none"> <li>■ Soil moisture should be maintained for good growth and yield.</li> <li>■ One or two light and uniform irrigation should be given at flowering and fruiting stage.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ माटोको नम राम्रो बृद्ध र उत्पादनको लागि कायम गर्नुपर्दछ।</li> <li>◆ एक वा दुई हल्का र एकसमान संचाई फल र फलफूल चरणमा दिनु पर्छ।</li> </ul>
Rapeseed-Mustard/Toria	Fruiting		<ul style="list-style-type: none"> <li>■ Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</li> <li>■ In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</li> <li>■ For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</li> </ul>
			<ul style="list-style-type: none"> <li>■ फल फल्ने र सलक्का गठन चरणहरू संचाईको लागि महत्त्वपूर्ण छ। त्यसोभए फल-फलने र फल लाग्ने चरणमा दुई संचाई लाभदायक छन्।</li> <li>■ सक्किको अवस्थामा मकै को बोट (सकेको) र चामल पराल जस्ता मल चंग सामग्रीहरू माटोको ओस संरक्षण गर्ने प्रयोग गर्न सक्न्छ।</li> <li>■ एफडको व्यवस्थापनका लागि, नीमको तेल (1500 पीपीएम) @ 4ml मल / एल स्प्रे गर्नुहोस्।</li> </ul>
Cole crops	Head formation		<ul style="list-style-type: none"> <li>■ During head initiation of and development stages proper moisture level of soil should be maintained.</li> <li>■ Cole crops should be harvest either on afternoon or early in the morning.</li> <li>■ Being a shallow crops earthing up must be carried on cole crops.</li> </ul>
			<ul style="list-style-type: none"> <li>■ <b>Avoid stagnant water in the field.</b></li> <li>■ प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उचित ओस तह कायम राख्नुपर्दछ।</li> <li>■ कोल बालीहरू (cabbage, cauliflower and broccoli)या त दिउसो वा बिहान सबै उठाउनु पर्छ।</li> <li>■ हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउनु पर्छ।</li> <li>■ खेतमा जामेको पानीलाई हटानुश।</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>■ Strict monitoring of crop against attack of late blight.</li> <li>■ Cover the crop during night to protect from frost.</li> <li>■ Apply irrigation at the base of plant whenever required.</li> </ul>
			<ul style="list-style-type: none"> <li>■ लेटब्लइट आक्रमण रोकनको लागि नियन्त्रण रेख देख गर्नुस्।</li> <li>■ शीतबाट बचाउन रातमा बालीलाई ढाक्नुहोस्।</li> </ul>

			<ul style="list-style-type: none"> <li>■ आवश्यकता अनुसार बिस्वाको फेदमा संचाई प्रयोग गर्नेहोस।</li> </ul>
<i>Animal Sciences and livestock management</i>			
Sheep/goat			<ul style="list-style-type: none"> <li>◆ During winter months special care should be taken for sheep, goat for external parasites.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ जाडो महिनाहरूमा भेडा र बाख्रा हरुलाई परजीवीहरू बाटा ब्याउनु ला ग विशेष ध्यान राख्नु पर्छ।</li> </ul>
Poultry/chicken			<ul style="list-style-type: none"> <li>◆ Keep the Vanaraja chicks in warm condition (32-33<sup>0</sup>C) during the first four weeks.</li> <li>◆ Low cost brooder should be made to prevent chick mortality due to cold stress.</li> <li>◆ Maintain brooding temperature through continuous electricity supply and for emergency Sigiri/Bukhari can be used.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ पहिलो चार हप्ताहरूमा भानाराजा चल्लाहरू न्यानो अवस्थामा (३२-३३<sup>0</sup>C) राख्नुहोस</li> <li>◆ चसो तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नको ला ग सस्तो पशु प्पालन गृह बनाउनु पर्छ।</li> <li>◆ पशु पालन गृह तापमान कायम गर्नको ला ग लगातार बिजुली प्रयोग गर्नस र आपतका लनको ला ग स गरि अथवा बुखारी प्रयोग गर्न स कन्छ।</li> </ul>

*Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim*

Name	Designation	Department
<b>Dr. R. K. Avasthe</b>	<b>Joint Director</b>	<b>Soil Science</b>
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology
Miss Tirtha Kumari Chettri	Met. Observer	Biochemistry

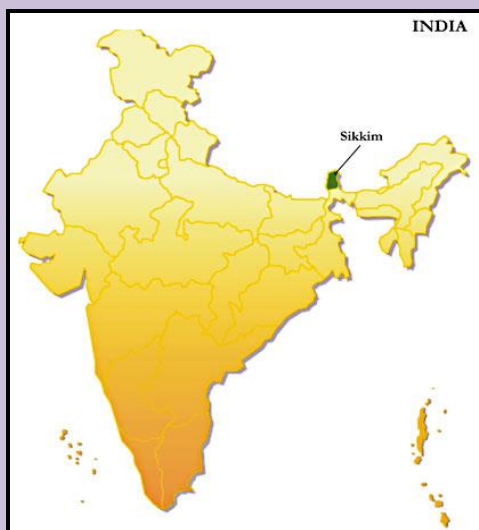


# AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF SOUTH SIKKIM

**PERIOD:**

**12<sup>th</sup> FEBRUARY to 16<sup>th</sup> FEBRUARY 2020**

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



**ISSUED ON 11<sup>th</sup> February 2020**

## 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

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

## **Value Added forecast for SOUTH-DISTRICT for next five days**

<b>↓Parameter/Date→</b>	<b>12/02/2020</b>	<b>13/02/2020</b>	<b>14/02/2020</b>	<b>15/02/2020</b>	<b>16/02/2020</b>
<b>Rainfall (mm)</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>	<b>No rainfall</b>
<b>Max Temp (°C)</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>18</b>	<b>17</b>
<b>Min Temp (°C)</b>	<b>08</b>	<b>08</b>	<b>08</b>	<b>07</b>	<b>07</b>
<b>Sky condition</b>	<b>Partially clear</b>	<b>Partially clear</b>	<b>Partially clear</b>	<b>Partially clear</b>	<b>Generally cloudy</b>
<b>Max RH (%)</b>	<b>75</b>	<b>72</b>	<b>74</b>	<b>79</b>	<b>85</b>
<b>Min RH (%)</b>	<b>55</b>	<b>52</b>	<b>55</b>	<b>60</b>	<b>65</b>
<b>Wind Speed (Kmph)</b>	<b>002</b>	<b>002</b>	<b>002</b>	<b>002</b>	<b>003</b>
<b>Wind Direction (deg)</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>

**Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly- W, North-westerly- N-W.**

### **Weather for preceding week**

<b>Date</b>	<b>Rainfall</b>	<b>Max. Temp</b>	<b>Min. Temp</b>
	<b>(mm)</b>	<b>(°C)</b>	<b>(°C)</b>
<b>7-2-2020</b>	<b>N/A</b>	<b>15.0</b>	<b>05.2</b>
<b>8-2-2020</b>	<b>N/A</b>	<b>17.0</b>	<b>05.4</b>
<b>9-2-2020</b>	<b>N/A</b>	<b>18.3</b>	<b>05.4</b>

### **Weather forecast valid up to 16<sup>th</sup> February 2020**

- There is probability of no rainfall on coming days.
- Max temp may be varying from 17-19°C, whereas, Min temp may vary from 7-8°C
- Sky will remain generally cloudy.
- Max RH is likely to be 72-85%, whereas, Min RH may vary from 52-65 %
- Wind speed may likely vary from 2-4 km/hr.
- Wind direction may blow from northeasterly direction
- Weekly cumulative rainfall= 000.0 mm

## AGRO-METEOROLOGICAL ADVISORIES

### General Advisories for all the crops/ livestock

- ✚ Apply irrigation if temperature falls down below 4-5°C.
- ✚ If dry condition prevails on field for longer time, apply water keep the field moist.
- ✚ While selecting site for construction of animal shed a site that allows sun light exposure as well as good wind control is preferable.
- ✚ Suitable soil water conservation technique should be maintained at the field; however, secondary source of irrigation should be available for vegetable crops.
- ✚ सँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पछि।
- ✚ यदि सुख्खा अवस्था लामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जग्गा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रण हुने हेर्नुस्।
- ✚ खेती मा पानी संरक्षण गर्नुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<b><i>Agricultural and Horticultural crops:</i></b>			
Potato	Vegetative stage		<ul style="list-style-type: none"> <li>■ As a rule, soil must keep wet but hardening or too wet condition must be avoided.</li> <li>■ Irrigate the crop at 30-35 DAS and maintain the available soil moisture (ASM) at about 75 %.</li> <li>■ To protect the potato from chilling injury apply light irrigation on it.</li> <li>■ <b>At 40-45 DAS little hoeing / earthing up should be done.</b></li> <li>■ <b>Infected plants with late blight disease must be destroyed as soon as detected.</b></li> <li>■ Spray Blitox @ 2.5 g/l at 7-10 days interval to control Late blight disease.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ एक नियमको रूपमा, माटो भजेको हुनुपर्दछ तर कडा हँदै छ वा धेरै भजेको अवस्थाबाट टाढा रहनु पर्छ।</li> <li>◆ ३०-३५ दिन बाद बालीमा सँचाइ गर्नुहोस् र उपलब्ध माटोको नम (ASM) लाई ७५% मा कायम राख्नुहोस्।</li> <li>◆ आलुलाई जारोबाट बचाउन यसमा हल्का सँचाई लगाउनुहोस्।</li> <li>◆ ४०-४५दिनको बाद खेतिमा माटो उठाएर लगाउनु पर्छ।</li> <li>◆ लेटब्लइट रोग संक्रमित हुनु बित्तिकै</li> </ul>

			<p>आल् पत्ता लाई नष्ट गरदीन् पदेछ।          लेट ब्लाइट रोग नियन्त्रण गर्न          7-10 दिनको मध्यान्तरमा ब्लिटक्स          @ 2.5 g/l स्प्रे गर्नुहोस्।</p>
Field pea	Pod formation		<ul style="list-style-type: none"> <li>Soil moisture should be maintained for good growth and yield.</li> <li>One or two light and uniform irrigation should be given at flowering and fruiting stage.</li> </ul>
			<ul style="list-style-type: none"> <li>माटोको न म राम्रो बृद्ध र उत्पादनको ला ग कायम गर्नुपर्दछ।</li> <li>एक वा दुई हल्का र एकसमान संचाइ फूल र फलफूल चरणमा दिनु पर्छ।</li> </ul>
Rapeseed-Mustard/Toria	Fruiting		<ul style="list-style-type: none"> <li>Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</li> <li>In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</li> <li>For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</li> </ul>
			<ul style="list-style-type: none"> <li>फूल फुल्ने र सलक्वा गठन चरणहरू संचाइको ला ग महत्त्वपूर्ण छ। त्यसोभए फूल-फुल्ने र फल लाग्ने चरणमा दुई संचाई लाभदायक छन्।</li> <li>सक्किमको अवस्थामा मकै को बोट (स्केको) र चामल पराल जस्ता मल चंग सामग्रीहरू माटोको ओस संरक्षण गर्न प्रयोग गर्न सक्न्छ।</li> <li>एफडको व्यवस्थापनका ला ग, नीमको तेल ( 1500 पीपीएम) @ 4ml म ल / एल स्प्रे गर्नुहोस्</li> </ul>
Cole crops	Head formation		<ul style="list-style-type: none"> <li>During head initiation of and development stages proper moisture level of soil should be maintained.</li> <li>Cole crops should be harvest either on afternoon or early in the morning.</li> <li>Being a shallow crops earthing up must be carried on cole crops.</li> </ul>
			<ul style="list-style-type: none"> <li><b>Avoid stagnant water in the field.</b></li> <li>प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उ चत ओस तह कायम राख्नुपर्दछ।</li> <li>कोल बालीहरू (cabbage, cauliflower and broccoli)या त दिउँसो वा बिहान सबै उठाउनु पर्छ।</li> <li>हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउनु पर्छ।</li> <li>खेतमा जामेको पानीलाई हटानुश।</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Strict monitoring of crop against attack of late blight.</li> <li>Cover the crop during night to protect from frost.</li> <li>Apply irrigation at the base of plant whenever required.</li> </ul>
			<ul style="list-style-type: none"> <li>लेटब्लइट आक्रमण रोकनको ला ग नियन्त्रण रेख देख गर्नुस्।</li> <li>शीतबाट बचाउन रातमा बालीलाई</li> </ul>

			ढाक्नहोस। ■ आवश्यकता अनुसार बिरुवाको फेदमा सचाई प्रयोग गर्नहोस।
<i>Animal Sciences and livestock management</i>			
Sheep/goat			♦ During winter months special care should be taken for sheep, goat for external parasites.
			♦ जाडो महिनाहरूमा भेडा र बाख्रा हरुलाई परजीवीहरू बाटा ब्याउनु ला ग विशेष ध्यान राख्नु पर्छ।
Poultry/chicken			♦ Keep the Vanaraja chicks in warm condition (32-33°C) during the first four weeks. ♦ Low cost brooder should be made to prevent chick mortality due to cold stress. ♦ Maintain brooding temperature through continuous electricity supply and for emergency Sigiri/Bukhari can be used.
			♦ पहिलो चार हप्ताहरूमा भानाराजा चलाहरू न्यानो अवस्थामा (३२-३३°C) राख्नुहोस ♦ चर्सी तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नको लागि सस्तो पशु पालन गृह बनाउनु पर्छ। ♦ पशु पालन गृह तापमान कायम गर्नको लागि लगातार बिजुली प्रयोग गर्नु र आपतका लनको लागि सगरी अथवा बुखारी प्रयोग गर्न सक्नु।

*Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim*

Name	Designation	Department
<b>Dr. R. K. Avasthe</b>	<b>Joint Director</b>	<b>Soil Science</b>
<i>Dr. Raghavendra Singh</i>	Senior scientist and Head (I/C)	Agronomy
<i>Dr. P. K. Pathak</i>	SMS	Animal science
<i>Dr. J.K. Singh</i>	SMS	Plant Breeding
<i>Dr. Manoj Kumar</i>	SMS	Agronomy
<i>Sh. Boniface Lepcha</i>	SMS	Horticulture
<i>Sh. Santanu Das</i>	SMS	Agril. Meteorology
<i>Miss Tirtha Kumari Chettri</i>	Met. Observer	Biochemistry

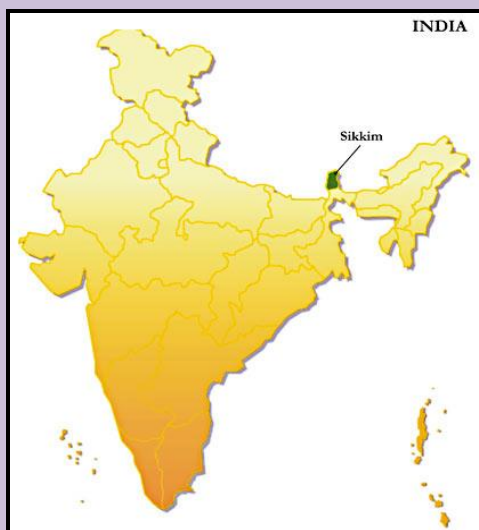


# AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF WEST SIKKIM

**PERIOD:**

**12<sup>th</sup> FEBRUARY to 16<sup>th</sup> FEBRUARY 2020**

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



**ISSUED ON 11<sup>th</sup> February 2020**

## 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

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

### Value Added forecast for WEST-DISTRICT for next five days

↓Parameter/Date→	12/02/2020	13/02/2020	14/02/2020	15/02/2020	16/02/2020
Rainfall (mm)	No rain	No rain	No rain	No rain	No rain
Max Temp (°C)	18	18	18	17	16
Min Temp (°C)	07	07	07	06	06
Sky condition	Partially clear	Partially clear	Partially clear	Partially clear	Generally cloudy
Max RH (%)	84	80	80	85	89
Min RH (%)	65	64	65	70	72
Wind Speed (Kmph)	003	003	003	002	003
Wind Direction (deg)	NW	NW	NW	NW	NW

Northerly- **N**, North-Easterly- **N-E**, Easterly- **E**, South-Easterly- **S-E**, Southerly- **S**, South-Westerly- **S-W**, Westerly- **W**, North-westerly- **N-W**.

Weather for preceding week			
Date	Rainfall	Max. Temp	Min. Temp
	(mm)	(°C)	(°C)
7-2-2020	000	14.4	04.5
8-2-2020	000	15.8	04.0
9-2-2020	000	N/A	04.9

### Weather forecast valid up to 16<sup>th</sup> February 2020

- There is probability of no rainfall on coming days.
- Max temp may be varying from 16-18°C, whereas, Min temp may vary from 6-7°C
- Sky will remain generally cloudy.
- Max RH is likely to be 80-89 %, whereas, Min RH may vary from 64-72 %
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from northwesterly.
- Weekly cumulative rainfall= 000.0 mm

## AGRO-METEOREOLOGICAL ADVISORIES

### General Advisories for all the crops/ livestock

- ✚ Apply irrigation if temperature falls down below 4-5°C.
- ✚ If dry condition prevails on field for longer time, apply water keep the field moist.
- ✚ While selecting site for construction of animal shed a site that allows sun light exposure as well as good wind control is preferable.
- ✚ Suitable soil water conservation technique should be maintained at the field; however, secondary source of irrigation should be available for vegetable crops.
- ✚ सँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पछि।
- ✚ यदि सुख्खा अवस्था लामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जग्गा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रण हुने हेर्नुस्।
- ✚ खेती मा पानी संरक्षण गरनुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<b><i>Agricultural and Horticultural crops:</i></b>			
Potato	Vegetative stage		<ul style="list-style-type: none"> <li>■ As a rule, soil must keep wet but hardening or too wet condition must be avoided.</li> <li>■ Irrigate the crop at 30-35 DAS and maintain the available soil moisture (ASM) at about 75 %.</li> <li>■ To protect the potato from chilling injury apply light irrigation on it.</li> <li>■ <b>At 40-45 DAS little hoeing / earthing up should be done.</b></li> <li>■ <b>Infected plants with late blight disease must be destroyed as soon as detected.</b></li> <li>■ Spray Blitox @ 2.5 g/l at 7-10 days interval to control Late blight disease.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ एक नियमको रूपमा, माटो भर्जेको हुनुपर्दछ तर कडा हुँदै छ वा धेरै भर्जेको अवस्थाबाट टाढा रहनु पर्छ।</li> <li>◆ ३०-३५ दिन बाद बालीमा सँचाइ गर्नुहोस् र उपलब्ध माटोको नम (ASM) लाई ७५% मा कायम राख्नुहोस्</li> <li>◆ आलुलाई जारोबाट बचाउन यसमा हल्का सँचाइ लगाउनुहोस्।</li> <li>◆ ४०-४५दिनको बाद खेतिमा माटो उठाएर लगाउनु पर्छ।</li> <li>◆ लेटब्लइट रोग संक्रमित हुनु बित्तिकै आलु पत्ता लाई नष्ट गरदिनु पर्दछ।</li> </ul>

			<ul style="list-style-type: none"> <li>◆ लेट ब्लाइट रोग नियन्त्रण गर्ने 7-10 दिनको मध्यान्तरमा ब्लिटक्स @ 2.5 g/l स्प्रे गर्नुहोस्।</li> </ul>
Field pea	Pod formation		<ul style="list-style-type: none"> <li>■ Soil moisture should be maintained for good growth and yield.</li> <li>■ One or two light and uniform irrigation should be given at flowering and fruiting stage.</li> </ul>
			<ul style="list-style-type: none"> <li>◆ माटोको नम राम्रो बृद्ध र उत्पादनको लागि कायम गर्नुपर्दछ।</li> <li>◆ एक वा दुई हल्का र एकसमान संचाई फल र फलफूल चरणमा दिनु पर्छ।</li> </ul>
Rapeseed-Mustard/Toria	Fruiting		<ul style="list-style-type: none"> <li>■ Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</li> <li>■ In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</li> <li>■ For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</li> </ul>
			<ul style="list-style-type: none"> <li>■ फल फल्ने र सलक्का गठन चरणहरू संचाईको लागि महत्त्वपूर्ण छ। त्यसोभए फल-फलने र फल लाग्ने चरणमा दुई संचाई लाभदायक छन्।</li> <li>■ सक्किको अवस्थामा मकै को बोट (सकेको) र चामल पराल जस्ता मल चंग सामग्रीहरू माटोको ओस संरक्षण गर्ने प्रयोग गर्न सक्न्छ।</li> <li>■ एफडको व्यवस्थापनका लागि, नीमको तेल (1500 पीपीएम) @ 4ml मल / एल स्प्रे गर्नुहोस्।</li> </ul>
Cole crops	Head formation		<ul style="list-style-type: none"> <li>■ During head initiation of and development stages proper moisture level of soil should be maintained.</li> <li>■ Cole crops should be harvest either on afternoon or early in the morning.</li> <li>■ Being a shallow crops earthing up must be carried on cole crops.</li> </ul>
			<ul style="list-style-type: none"> <li>■ <b>Avoid stagnant water in the field.</b></li> <li>■ प्रमुख पहलको क्रममा र वकास चरणहरूमा माटोको उचित ओस तह कायम राख्नुपर्दछ।</li> <li>■ कोल बालीहरू (cabbage, cauliflower and broccoli) या त दिउसा वा बिहान सबै उठाउन पर्छ।</li> <li>■ हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउन पर्छ।</li> <li>■ खेतमा जामेको पानीलाई हटानुश।</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>■ Strict monitoring of crop against attack of late blight.</li> <li>■ Cover the crop during night to protect from frost.</li> <li>■ Apply irrigation at the base of plant whenever required.</li> </ul>
			<ul style="list-style-type: none"> <li>■ लेटब्लइट आक्रमण रोकनको लागि नियन्त्रण रेख देख गर्नुस्।</li> <li>■ शीतबाट बचाउन रातमा बालीलाई ढाक्नुहोस्।</li> </ul>

			■ आवश्यकता अनुसार बिस्वाको फेदमा संचाई प्रयोग गर्नेहोस।
<i>Animal Sciences and livestock management</i>			
Sheep/goat			◆ During winter months special care should be taken for sheep, goat for external parasites.
			◆ जाडो महिनाहरूमा भेडा र बाख्रा हरुलाई परजीवीहरू बाटा बचाउनु ला ग विशेष ध्यान राख्नु पर्छ।
Poultry/chicken			◆ Keep the Vanaraja chicks in warm condition (32-33 <sup>0</sup> C) during the first four weeks. ◆ Low cost brooder should be made to prevent chick mortality due to cold stress. ◆ Maintain brooding temperature through continuous electricity supply and for emergency Sigiri/Bukhari can be used.
			◆ पहिलो चार हप्ताहरूमा भानाराजा चलाहरू न्यानो अवस्थामा (३२-३३ <sup>0</sup> C) राख्नुहोस ◆ चर्सी तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नको ला ग सस्तो पशु प्पालन गृह बनाउनु पर्छ। ◆ पशु पालन गृह तापमान कायम गर्नको ला ग लगातार बिजुली प्रयोग गर्नस र आपतका लनको ला ग स गरि अथवा बुखारी प्रयोग गर्न स कन्छ।

*Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim*

Name	Designation	Department
<b>Dr. R. K. Avasthe</b>	<b>Joint Director</b>	<b>Soil Science</b>
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology
Miss Tirtha Kumari Chettri	Met. Observer	Biochemistry