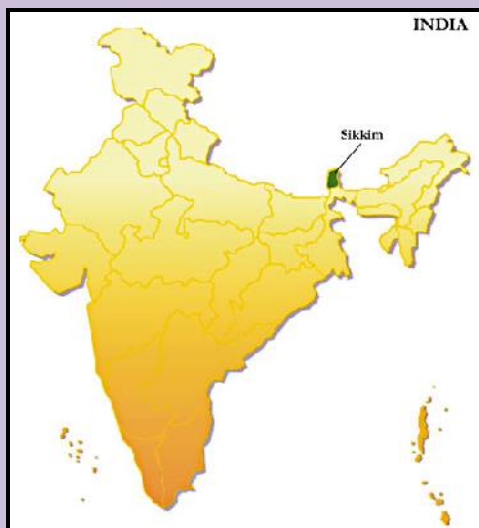




AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF **NORTH SIKKIM** PERIOD:

19th FEBRUARY to 23rd FEBRUARY 2020

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



ISSUED ON 18th 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 NORTH-DISTRICT for next five days

Parameter/Date	19/02/2020	20/02/2020	21/02/2020	22/02/2020	23/02/2020
Rainfall (mm)	Very light rainfall	Light rainfall	Light rainfall	Very light rainfall	Light rainfall
Max Temp ($^{\circ}\text{C}$)	18	15	16	17	17
Min Temp ($^{\circ}\text{C}$)	10	08	08	09	09
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	90	93	92	90	91
Min RH (%)	70	82	75	72	75
Wind Speed (Kmph)	003	003	003	002	002
Wind Direction (deg)	SE	SE	S	E	SE

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)	($^{\circ}\text{C}$)	($^{\circ}\text{C}$)
15-2-2020	000	15.3	10.6
16-2-2020	000	20.3	09.6
17-2-2020	000	17.3	11.1

Weather forecast valid up to 23rd February 2020

- There is probability of light rainfall on coming days.
- Max temp may be varying from 15-18 $^{\circ}\text{C}$, whereas, Min temp may vary from 8-10 $^{\circ}\text{C}$
- Sky will remain generally cloudy.
- Max RH is likely to be 90-93%, whereas, Min RH may vary from 70-82 %
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from southeasterly direction
- Weekly cumulative rainfall= 025.0 mm

AGRO-METEREOLOGICAL 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.

- ✚ सिँचाई लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पछि।
- ✚ यदि सुख्खा अवस्था लामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चिसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जग्गा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रण हुने हेर्नुस्।
- ✚ खेती मा पानी संरक्षण गर्नको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सिँचाईको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

Name of the crop/Animal	Stage	Cultural practices/ Pest/ Diseases	Agro-Met Advisories
<i>Agricultural and Horticultural crops:</i>			
Potato	Vegetative stage		<ul style="list-style-type: none"> ■ As a rule, soil must keep wet but hardening or too wet condition must be avoided. ■ Irrigate the crop at 30-35 DAS and maintain the available soil moisture (ASM) at about 75 %. ■ To protect the potato from chilling injury apply light irrigation on it. ■ At 40-45 DAS little hoeing / earthing up should be done. ■ Infected plants with late blight disease must be destroyed as soon as detected. ■ Spray Blitox @ 2.5 g/l at 7-10 days interval to control Late blight disease.
			<ul style="list-style-type: none"> ◆ एक नियमको रूपमा माटो भित्रको हनपदछ तर कडा हुँदै छ वा धेरै भित्रको अवस्थाबाट टाढा रहनु पर्छ। ◆ ३०-३५ दिन बाद बालीमा सिँचाई गर्नुहोस् र उपलब्ध माटोको नमि (ASM) लाई ७५% मा कायम राख्नुहोस्। ◆ आलुलाई जारोबाट बचाउन यसमा हल्का सिँचाई लगाउनुहोस्। ◆ ४०-४५दिनको बाद खेतीमा माटो उठाएर लगाउनु पर्छ। ◆ लेटब्लइट रोग संक्रमित हुन बित्तिकै आलु पत्ता लाई नष्ट गरदिने पर्दछ। ◆ लेट ब्लाइट रोग नियन्त्रण गर्न ७-१० दिनको मध्यान्तरमा ब्लिटक्स @ २.५ g/l स्प्रे गर्नुहोस्।
Field pea	Pod formation		<ul style="list-style-type: none"> ■ Soil moisture should be maintained for good growth and yield. ■ One or two light and uniform irrigation should be given at flowering

			and fruiting stage.
			<ul style="list-style-type: none"> माटोको नमो राम्रो बढ्ने र उत्पादनको लागि कायम गर्नुपर्दछ। एक वा दुई हल्का र एकसमान सिंचाइ फूल र फलफूल चरणमा दिनु पर्छ।
Rapeseed-Mustard/Toria	Fruiting		<ul style="list-style-type: none"> Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial. In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture. For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.
			<ul style="list-style-type: none"> फूल फुल्ने र सिलिक्वा गठन चरणहरू सिंचाइको लागि महत्त्वपूर्ण छन्। त्यसोभए फलफूल, र फल, बढ्ने। चरणमा दुई सिंचाई लाभदायक छन्। सिक्किमको अवस्थामा मकै को बोट (सुकेको) र चामल पराल जस्ता मलचिग सामग्रीहरू माटोको संरक्षण गर्न प्रयोग गर्न सकिन्छ। एफिडको व्यवस्थापनका लागि, नीमको तेल (1500 पीपीएम) @ 4ml मिलि / एल स्प्रे गर्नुहोस्।
Cole crops	Head formation		<ul style="list-style-type: none"> During head initiation of and development stages proper moisture level of soil should be maintained. Cole crops should be harvest either on afternoon or early in the morning. Being a shallow crops earthing up must be carried on cole crops.
			<ul style="list-style-type: none"> Avoid stagnant water in the field. प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उचित ओस तह कायम राख्नुपर्दछ। कोल बालीहरू (cabbage, cauliflower and broccoli) या त दिउसो वा बिहान सबै उठाउन पर्छ। हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउन पर्छ। खेतमा जामेको पानीलाई हटानुश।
Tomato	Fruiting		<ul style="list-style-type: none"> Strict monitoring of crop against attack of late blight. Cover the crop during night to protect from frost. Apply irrigation at the base of plant whenever required.
			<ul style="list-style-type: none"> लेटब्लाइट आक्रमण रोकनको लागि नियन्त्रण रेख देख गर्नुस्। शीतबाट बचाउन रातमा बाल ढाक्नुहोस्। आवश्यकता अनुसार बिरुवाको फेदमा सिंचाई प्रयोग गर्नुहोस्।

Sheep/goat			<ul style="list-style-type: none"> During winter months special care should be taken for sheep, goat for external parasites.
			<ul style="list-style-type: none"> जाडो महिनाहरूमा भेडा र बाख्रा हरुलाई परजीवीहरू बाटा ब्याउनु लागि विशेष ध्यान राख्नु पर्छ।
Poultry/chicken			<ul style="list-style-type: none"> 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.
			<ul style="list-style-type: none"> पहिलो चार हप्ताहरूमा भानाराजा चल्ताहरू न्यानो अवस्थामा (३२-३३°C) राख्नुहोस् चिसो तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नको लागि सस्तो पशु प्पालन गृह बनाउनु पर्छ। पशु पालन गृह तापमान कायम गर्नको लागि लगातार बिजुली प्रयोग गर्नुस र आपतकालिनको लागि सिगिरि अथवा बुखारी प्रयोग गर्न सकिन्छ।

Agro-Met Advisory member of ICAR-NOFRI and KVVK- East Sikkim

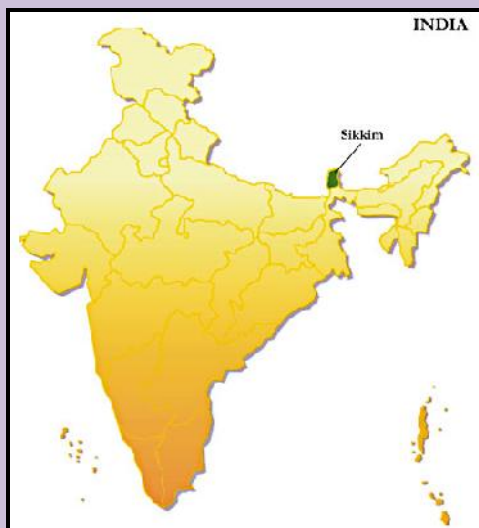
Name	Designation	Department
Dr. R. K. Avasthe	Joint Director	Soil Science
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology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



AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF **EAST SIKKIM** PERIOD:

19th FEBRUARY to 23rd FEBRUARY 2020

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



ISSUED ON 18th 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:

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- 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	19/02/2020	20/02/2020	21/02/2020	22/02/2020	23/02/2020
Rainfall (mm)	Very light rainfall	Light rainfall	No rain	Very light rainfall	Light rainfall
Max Temp (⁰ C)	14	12	13	13	13
Min Temp (⁰ C)	09	07	07	07	08
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	90	92	90	90	92
Min RH (%)	70	80	70	70	72
Wind Speed (Kmph)	002	003	002	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
	(mm)	(⁰ C)	(⁰ C)
15-2-2020	001	11.7	08.0
16-2-2020	000	15.3	07.8
17-2-2020	000	13.7	08.4

Weather forecast valid up to 23rd February 2020

- There is probability of very light rainfall on coming days.
- Max temp may be varying from 12-14°C, whereas, Min temp may vary from 7-9°C
- Sky will remain generally cloudy.
- Max RH is likely to be 90-92%, whereas, Min RH may vary from 70-80 %
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from northeasterly direction
- Weekly cumulative rainfall= 012.0 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.
- ✚ सिँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पिछ।
- ✚ यदि सुख्खा अवस्थालामो समयसम्म खेतमा रहन्छ भने पानी प्रय ग गर्नुहोस् खेतलाई चिसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जगा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रन हुने हेर्नुस् ।
- ✚ खेती मा पानी संरक्षण गरनुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सिँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

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

			<p>आल्फा पन्ता लाई नष्ट गरदोन पदेछ। लेट ब्लाइट रोग नियन्त्रण गर्न 7-10 दिनको मध्यान्तरमा ब्लिटक्स @ 2.5 g/l स्प्रे गर्नुहोस्।</p>
Field pea	Pod formation		<p>Soil moisture should be maintained for good growth and yield.</p> <p>One or two light and uniform irrigation should be given at flowering and fruiting stage.</p>
			<p>माटोको नमि राम्रो बढि र उत्पादनको लागि कायम गर्नुपर्दछ। एक वा दुई हल्का र एकसमान सिंचाइ फूल र फलफूल चरणमा दिनु पर्छ।</p>
Rapeseed-Mustard/Toria	Fruiting		<p>Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</p> <p>In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</p> <p>For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</p>
			<p>फूल फुल्ने र सिलिक्वा गठन चरणहरू सिंचाइको लागि महत्त्वपूर्ण छ। त्यसोभए फूल-फुलने र फल लाग्ने चरणमा दुई सिंचाई लाभदायक छन्। सिक्किमको अवस्थामा मकै को बोट (सूकेको) र चामल पराल जस्ता मलचिग सामग्रीहरू माटोको संरक्षण गर्न प्रयोग गर्न सकिन्छ। एफिडको व्यवस्थापनका लागि, नीम तेल (1500 पीपीएम) @ 4ml मिलि / एल स्प्रे गर्नुहोस्।</p>
Cole crops	Head formation		<p>During head initiation of and development stages proper moisture level of soil should be maintained.</p> <p>Cole crops should be harvest either on afternoon or early in the morning.</p> <p>Being a shallow crops earthing up must be carried on cole crops.</p>
			<p>Avoid stagnant water in the field.</p> <p>प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उचित ओस तह कायम राख्नुपर्दछ। कोल बालीहरू (cabbage, cauliflower and broccoli) या त दिउसो वा बिहान सबै उठाउन पर्छ। हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउन पर्छ। खेतमा जामेको पानीलाई हटानुश।</p>
Tomato	Fruiting		<p>Strict monitoring of crop against attack of late blight.</p> <p>Cover the crop during night to protect from frost.</p> <p>Apply irrigation at the base of plant whenever required.</p>
			<p>लेटब्लाइट आक्रमण रोकनको लागि नियन्त्रण रेख देख गर्नुस्। शीतबाट बचाउन रातमा बालीलाई</p>

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

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

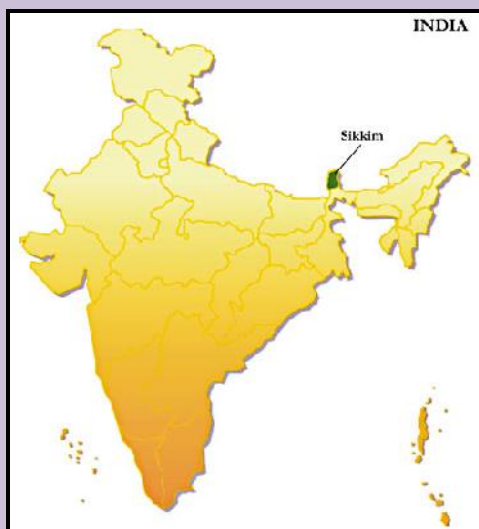
Name	Designation	Department
Dr. R. K. Avasthe	Joint Director	Soil Science
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology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



AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF **SOUTH SIKKIM** PERIOD:

19th FEBRUARY to 23rd FEBRUARY 2020

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



ISSUED ON 18th 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

Parameter/Date	19/02/2020	20/02/2020	21/02/2020	22/02/2020	23/02/2020
Rainfall (mm)	No rain	Very light rainfall	No rain	No rain	No rain
Max Temp ($^{\circ}\text{C}$)	19	16	17	18	17
Min Temp ($^{\circ}\text{C}$)	10	08	08	09	09
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	82	90	84	80	85
Min RH (%)	60	70	68	62	65
Wind Speed (Kmph)	002	002	003	002	002
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
	(mm)	($^{\circ}\text{C}$)	($^{\circ}\text{C}$)
15-2-2020	N/A	15.7	09.5
16-2-2020	N/A	18.9	08.6
17-2-2020	N/A	18.8	09.1

Weather forecast valid up to 23rd February 2020

- There is probability of no rainfall on coming days.
- Max temp may be varying from 16-19 $^{\circ}\text{C}$, whereas, Min temp may vary from 8-10 $^{\circ}\text{C}$
- Sky will remain generally cloudy.
- Max RH is likely to be 82-90%, whereas, Min RH may vary from 60-70 %
- Wind speed may likely vary from 2-3 km/hr.
- Wind direction may blow from northeasterly direction
- Weekly cumulative rainfall= 002.0 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.
- ✚ सिँचाइ लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पिछ।
- ✚ यदि सुख्खा अवस्थालामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चिसो 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 सिँचाइको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

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

			<p>आल् पन्ता लाई नष्ट गरदोन पदेछ। लेट ब्लाइट रोग नियन्त्रण गर्न 7-10 दिनको मध्यान्तरमा ब्लिटक्स @ 2.5 g/l स्प्रै गर्नहोस।</p>
Field pea	Pod formation		<p>Soil moisture should be maintained for good growth and yield.</p> <p>One or two light and uniform irrigation should be given at flowering and fruiting stage.</p>
			<p>माटोको नमि राम्रो बढि र उत्पादनको लागि कायम गर्नपर्दछ। एक वा दुई हल्का र एकसमान सिंचाई फूल र फलफूल चरणमा दिनु पर्छ।</p>
Rapeseed-Mustard/Toria	Fruiting		<p>Flowering and siliqua formation stages are critical for irrigation. So two irrigation at pre-bloom and pod formation stage are beneficial.</p> <p>In Sikkim condition mulching materials like maize stover and rice straw can be used to conserve soil moisture.</p> <p>For management of aphid, spray neem oil (1500 ppm) @ 4ml/l.</p>
			<p>फूल फुल्ने र सिलिक्वा गठन चरणहरू सिंचाईको लागि महत्त्वपूर्ण छ। त्यसोभए फलफुलने, र फल, बराने, चरणमा दुई सिंचाई लाभदायक छन्। सिक्किमको अवस्थामा मकै को बोट (सूकेको) र चामल पराल जस्त मलचिग सामग्रीहरू माटोको अं सरक्षण गर्न प्रयोग गर्न सकिन्छ। एफिडको व्यवस्थापनका लागि, नीलो तेल (1500 पीपीएम) @ 4ml मिलि / एल स्प्रै गर्नहोस।</p>
Cole crops	Head formation		<p>During head initiation of and development stages proper moisture level of soil should be maintained.</p> <p>Cole crops should be harvest either on afternoon or early in the morning.</p> <p>Being a shallow crops earthing up must be carried on cole crops.</p>
			<p>Avoid stagnant water in the field.</p> <p>प्रमुख पहलको क्रममा र विकास चरणहरूमा माटोको उचित ओस त कायम राख्नुपर्दछ। कोल बालीहरू (cabbage, cauliflower and broccoli) या त दिउसो वा बिहान सबै उठाउन पर्छ। हल्का जरा बाली भएको कोल बालीमा माटो उठाएर लगाउन पर्छ। खेतमा जामेको पानीलाई हटानुश।</p>
Tomato	Fruiting		<p>Strict monitoring of crop against attack of late blight.</p> <p>Cover the crop during night to protect from frost.</p> <p>Apply irrigation at the base of plant whenever required.</p>
			<p>लेटब्लइट आक्रमण रोकनको लागि नियन्त्रन रेख देख गर्नुस्। शीतबाट बचाउन रातमा बालीलाई</p>

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

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

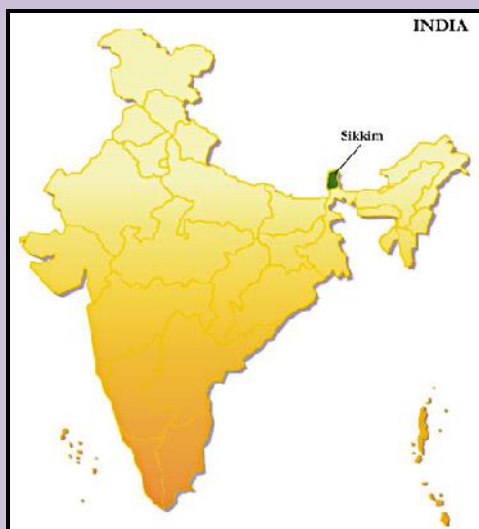
Name	Designation	Department
Dr. R. K. Avasthe	Joint Director	Soil Science
Dr. Raghavendra Singh	Senior scientist and Head (I/C)	Agronomy
Dr. P. K. Pathak	SMS	Animal science
Dr. J.K. Singh	SMS	Plant Breeding
Dr. Manoj Kumar	SMS	Agronomy
Sh. Boniface Lepcha	SMS	Horticulture
Sh. Santanu Das	SMS	Agril. Meteorology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



AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF **WEST SIKKIM** PERIOD:

19th FEBRUARY to 23rd FEBRUARY 2020

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



ISSUED ON 18th 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	19/02/2020	20/02/2020	21/02/2020	22/02/2020	23/02/2020
Rainfall (mm)	Very light rainfall	Light rainfall	No rain	No rain	Light rainfall
Max Temp (°C)	17	15	16	17	16
Min Temp (°C)	09	07	07	07	08
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	90	92	90	88	90
Min RH (%)	65	80	75	65	70
Wind Speed (Kmph)	003	003	003	003	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)
15-2-2020	000	12.7	08.4
16-2-2020	N/A	17.6	07.8
17-2-2020	N/A	16.4	08.9

Weather forecast valid up to 23rd February 2020

- There is probability of light rainfall on coming days.
- Max temp may be varying from 15-17°C, whereas, Min temp may vary from 7-9°C
- Sky will remain generally cloudy.
- Max RH is likely to be 88-92 %, whereas, Min RH may vary from 65-80 %
- Wind speed may likely 3 km/hr.
- Wind direction may blow from northwesterly.
- Weekly cumulative rainfall= 007.0 mm

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.
- ✚ सिँचाई लागू गर्नुहोस् यदि तापक्रम ४-५ डिग्री सेल्सियस तल झरे पिछ।
- ✚ यदि सुख्खा अवस्थालामो समयसम्म खेतमा रहन्छ भने पानी प्रयोग गर्नुहोस् खेतलाई चिसो राख्नुहोस्।
- ✚ जनावरहरूको निर्माणको लागि जगा छानदा सूर्य प्रकाशका साथै राम्रो हावा नियन्त्रन हुने हेर्नुस् ।
- ✚ खेती मा पानी संरक्षण गरनुको लागि तकनिक गरेर राख्नुपर्छ; यद्यपि तरकारी बालीका लागि सिँचाईको दोस्रो स्रोत उपलब्ध हुनुपर्दछ।

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

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

			■ आवश्यकता अनुसार बिरुवाको फेदमा सिचाई प्रयोग गर्नुहोस्।
<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 लागि विशेष ध्यान राख्नु पर्छ।
Poultry/chicken			◆ Keep the Vanaraja chicks in warm condition (32-33 ⁰ 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 ⁰ C) राख्नुहोस् ◆ चिसो तनावका कारण कुखुराहरूको मृत्युलाई रोक्न कम गर्नुको लागि सस्तो पशु प्पालन गृह बनाउनु पर्छ। ◆ पशु पालन गृह तापमान कायम गर्नुको लागि लगातार बिजुली प्रयोग गर्नुस र आपतकालिनको लागि सिगिरि अथवा बुखारी प्रयोग गर्न सकिन्छ।

Agro-Met Advisory member of ICAR-NOFRI and KVAFSU- East Sikkim

Name	Designation	Department
Dr. R. K. Avasthe	Joint Director	Soil Science
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