

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

#### **PERIOD:**

#### **7<sup>th</sup> SEPTEMBER to 11<sup>th</sup> SEPTEMBER' 2019**







#### ISSUED ON 6th September 2019

#### 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

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

<b>↓Parameter/Date</b> →	07/09/2019	08/09/2019	09/09/2019	10/09/2019	11/09/2019
Rainfall (mm)	Moderate rainfall	Light rain	Light rain	Moderate rainfall	Moderate rainfall
Max Temp ( <sup>0</sup> C)	30	30	30	28	28
Min Temp ( <sup>0</sup> C)	21	21	21	20	20
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Cloudy	Cloudy
Max RH (%)	91	92	92	93	93
Min RH (%)	84	84	84	85	85
Wind Speed (KmpH)	4	4	3	3	3
Wind Direction (deg)	S	S	S	SE	S

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

Weather for preceding week					
Date Rainfall Max. Temp Min. Temp					
	(mm)	(°C)	(°C)		
03/09/2019	056	N/A	21.0		
04/09/2019	010	27.8	19.8		
05/09/2019	030	29.8	20.4		

- > Probability of moderate rainfall
- Max temp may be varying from 28-30°C, whereas, Min temp may vary from 20-21°C
- > Sky will remain generally cloudy
- Max RH is likely to be 90-93 %, whereas, Min RH may vary from 81-85 %
- > Wind speed may likely vary from 3-4 km/hr.
- > Wind may blow from south easterly direction.
- > Weekly cumulative rainfall=92 mm

- **▶** Bunding at terrace should be done to reduce nutrient losses due to heavy rainfall
- **▶** Keep the field ready for black gram (pahelo dal) sowing
- Crop field should be free from weed, during flowering stage
- **▶** Jalkund should be dug out for rain water harvesting.
- ▶ Spraying of bio pesticides (neem based formulation 1500 ppm @5ml/lit. and copper oxychloride 50%WP @ 2.5g/lit.) at weekly interval for insect pest and diseases management
- **▶** Regular supplementation of vitamins and mineral mixture to the livestock is recommended to improve the productive and reproductive performance of animals.
- → Milching dairy cow should be feed 70-80 ml calcium daily for better milk yield and good health
- FMD (foot and Mouth Disease) vaccination should be given to cattle, goat and pig
- Enterotoxaemia & PPR vaccine is highly recommended for goat

Name of the crop/Animal	Stage	Cultural pr Pest/ Dis			Agro-Met Advisories
	Agricultural and Horticultural crops:				
Maize	Transplanting of (vegetative	•	Army worm	<ul><li> </li><li> </li></ul>	Harvest the crop in bright sunny days Green cobs can be harvested to sell in
Rice	Main field prepa transplan			<b>\$</b>	Apply <i>Azolla</i> in the paddy field Complete the first weeding
Black gram (Pahelo dal)	Land preparati sowing	on/		•	After harvesting of maize plough the land and apply well decomposed FYM @ 2.0 ton/ ha + vermicompost 0.5 ton/ha + neem cake 100 kg/ha Sow the seeds at spacing of 30-45 cm × 15 cm.

			@ @	ed treatment with Trichoderma sp. 5-10 g/kg seed and soil treatment 2.5 kg mixed with 50 kg FYM is commended.
Rjmash/Cowpe a	Land preparation/ Sowing		toi rai	epared the land & add 10-15 nnes/ha FYM in the pits or lines in ised bed, 10-15 days before anting.
Ginger/ Turmeric	Tillering stage		the Dr uri fre int Sta	emove the weeds without breaking e sprouted ginger tillers. The sench the ginger field with cow line at 1:4 (urine: water) ratio or lesh cow dung slurry at fortnightly therval art spraying copper oxy chloride @ 25 % at weekly interval
Large cardamom	Planting		♦ A be A ma  Vo no	2 years old nursery suckers should planted in the main field spacing of 1.8×1.8 m <sup>2</sup> should be aintained.  Soung white coloured roots should to be destroy while planting, while d roots should trimmed out.
Early kharif vegetables	Vegetative growth			eeding and intercultural operation ould be done
Red cherry pepper/Brinjal	Vegetative	Blight	av Sp we Fir 15	ants should be keep weed free and oid water stagnation oraying of COC @ 2-3 ml/lit. at eekly interval we spray of neem based formulation 00 ppm @ 5 ml/l lit. of weekly the erval for controlling of <i>Aphids</i>
Cole crops/ Tomato	Nursery preparation		ear ba bro (va an  Ar 20 be be	art preparation of nursery beds for rly and late kharif tomato se early varieties of cabbage (early ll) cauliflower (white excel), occoli (Aishwarya) and tomato arieties Arka rakshak, Arka samrat, d All rounder oply FYM 2 kg/m², neem cake @ 0 g/m², Trichoderma@ 1 % should incorporated in soil during nursery d preparation.

			inside system	the poly tunnel/rain shelter
Sikkim	Planting/fruiting		➤ Keep tl	he orchard weed free
Mandarin				g the pit of 3 feet $\times$ 3 feet $\times$ 3
				transplanting new saplings bil of the pit should be mixed
			_	YM @20 kg/pit
	Animal Sciences and	livestock	nanagen	nent
Tibetan Sheep				mended for feeding
				trate feed along with mineral
				e and salt. eding is recommended.
Yak			Recom	
				trate feed along with mineral
			mixtur	e and salt.
			•	eding is recommended.
				ing of hair is recommended
Chan and Coat				summer season
Sheep and Goat				ng of the sheep/goat should be 4-30 hr. after onset of heat.
				g of concentrate feed along
				ggery, mineral mixture and salt
			is reco	mmended.
				c application of fly repellents
				netting of dung pit is
			recomi	mended.
Cattle			Farmer	s are advised to look for heat
			_	specially during early morning
				evening and ensure breeding
				dairy cattle within 12-18 hours
				nset of heat symptoms ed feeding of dairy animals
				ow calf suckling immediately
				arturition is recommended.
				rum (first three days milk)
			_	g to new born calf for first three
			. •	f life should be ensured.
				hand milking should be
			practic  Freque	ed. nt incomplete milking at
			-	l of 4hrs should be practiced
				arturition for minimum 1 week.
			PC	

			Later on, complete milking in subsequent day is recommended.
Poultry		Coccidi osis, Ranikh et disease	subsequent day is recommended. <ul> <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 is recommended.</li> <li>♦ Inclusion of turmeric powder @ 10g/kg in poultry feed for prevention of Coccidiosis is recommended.</li> <li>♦ Maintenance of brooder temperature for chicks with the help of electrical bulbs for initial one month.</li> <li>♦ Ranikhet vaccination for poultry at 5-7 days and at 28-30 days of age is highly recommended.</li> <li>♦ Calcium/shell grit and multi vitamin supplementation is strongly recommended to optimize egg production.</li> <li>♦ Occasional spraying of ectoparasiticides viz., deltamethrin/cypermethrin @ 1% v/v</li> </ul>
Pig	All stages	Swine fever	<ul> <li>in water is recommended.</li> <li>♦ Keep floor dry to avoid skin diseases.</li> <li>♦ Weaning is recommended at the age of 8 weeks for crossbreds and 10 weeks for indigenous pigs.</li> <li>♦ Swine fever vaccine at the age of 3 months followed by annual booster dose is recommended.</li> <li>♦ Critical heat detection of sow/ gilt in early morning and late evening is recommended.</li> <li>♦ Farmers can incorporate low cost locally available feed resources (60%) for feeding pigs to reduce the cost of feeding</li> </ul>

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:









#### ISSUED ON 6th September 2019

#### 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

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

<b>↓Parameter/Date</b> →	07/09/2019	08/09/2019	09/09/2019	10/09/2019	11/09/2019
Rainfall (mm)	Light rainfall	Light rainfall	Light rainfall	Moderate rainfall	Moderate rainfall
Max Temp ( <sup>0</sup> C)	22	23	24	22	22
Min Temp ( <sup>0</sup> C)	18	18	18	18	18
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Cloudy
Max RH (%)	92	92	92	93	93
Min RH (%)	85	85	85	86	86
Wind Speed (KmpH)	003	003	002	002	002
Wind Direction (deg)	NE	NE	NE	NE	Ē

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

	Weather for preceding week				
Date Rainfall Max. Temp Min. Temp					
	(mm)	(°C)	(°C)		
03/09/2019	015	22.9	18.7		
04/09/2019	016	22.6	17.8		
05/09/2019	004	23.8	18.3		

- > Probability of light rainfall
- Max temp may be varying from 22-24°C, whereas, Min temp may vary from 0-18°C
- > Sky will remain generally cloudy
- > Max RH is likely to be 92-93 %, whereas, Min RH may vary from 85-86 %
- > Wind speed may likely vary from 2-3 km/hr.
- > Wind may blow from northeasterly direction
- > Weekly cumulative rainfall= 68 mm

- **▶** Bunding at terrace should be done to reduce nutrient losses due to heavy rainfall
- Keep the field ready for black gram (pahelo dal) sowing
- Crop field should be free from weed, during flowering stage
- Jalkund should be dug out for rain water harvesting.
- ▶ Spraying of bio pesticides (neem based formulation 1500 ppm @5ml/lit. and copper oxychloride 50%WP @ 2.5g/lit.) at weekly interval for insect pest and diseases management
- **→** Regular supplementation of vitamins and mineral mixture to the livestock is recommended to improve the productive and reproductive performance of animals.
- → Milching dairy cow should be feed 70-80 ml calcium daily for better milk yield and good health
- FMD (foot and Mouth Disease) vaccination should be given to cattle, goat and pig
- Enterotoxaemia & PPR vaccine is highly recommended for goat

Name of the	Stage	Cultural p			Agro-Met Advisories
crop/Animal		Pest/ Dis	eases		
	Agricultural and Horticultural crops:				
Maize	Transplanting of	completed	Army		Harvest the crop in bright sunny days
	(vegetative	stage)	worm		Green cobs can be harvested to sell in
					the market.
Rice	Main field prepa	aration and		<b>\limits</b>	Apply <i>Azolla</i> in the paddy field
	transplan	ting		<b>*</b>	Complete the first weeding
Black gram	Land				After harvesting of maize plough the
(Pahelo dal)	preparati				land and apply well decomposed
	sowing	g			FYM @ 2.0 ton/ ha + vermicompost
					0.5 ton/ha + neem cake 100 kg/ha
					Sow the seeds at spacing of 30-45 cm
					× 15 cm.

			<b>*</b>	Seed treatment with Trichoderma sp.
				@ 5-10 g/kg seed and soil treatment
				@ 2.5 kg mixed with 50 kg FYM is
71 1/6				recommended.
Rjmash/Cowpe	Land preparation/		<b>*</b>	Prepared the land & add 10-15
a	Sowing			tonnes/ha FYM in the pits or lines in
				raised bed, 10-15 days before
				planting.
Ginger/	Tillering stage			Remove the weeds without breaking
Turmeric				the sprouted ginger tillers.
				Drench the ginger field with cow
				urine at 1:4 (urine: water) ratio or
				fresh cow dung slurry at fortnightly
				interval
				Start spraying copper oxy chloride @
				0.25 % at weekly interval
Large	Planting			j
cardamom				be planted in the main field
				A spacing of 1.8×1.8 m <sup>2</sup> should be
				maintained.
				Young white coloured roots should
				not be destroy while planting, while
				old roots should trimmed out.
Early kharif	Vegetative growth		<b>\limits</b>	Weeding and intercultural operation
vegetables				should be done
D 1 1	**	DI 1		
Red cherry	Vegetative	Blight	~	Plants should be keep weed free and
pepper/Brinjal			_	avoid water stagnation
			*	Spraying of COC @ 2-3 ml/lit. at weekly interval
				Five spray of neem based formulation
				1500 ppm @ 5 ml/1 lit. of weekly
				interval for controlling of <i>Aphids</i>
Cole crops/	Nursery preparation		<b>\limits</b>	Start preparation of nursery beds for
Tomato				early and late kharif tomato
				Use early varieties of cabbage (early
				ball) cauliflower (white excel),
				broccoli (Aishwarya) and tomato
				(varieties Arka rakshak, Arka samrat,
				and All rounder
				Apply FYM 2 kg/m <sup>2</sup> , neem cake @
				200 g/m <sup>2</sup> , Trichoderma@ 1 % should
				be incorporated in soil during nursery
				bed preparation.

		Nursery bed should be prepared
		inside the poly tunnel/rain shelter
		system.
Sikkim	Planting/fruiting	♦ Keep the orchard weed free
Mandarin		$ ightharpoonup$ Digging the pit of 3 feet $\times$ 3 feet $\times$ 3
		feet for transplanting new saplings
		Top soil of the pit should be mixed
		with FYM @20 kg/pit
	Animal Sciences and	livestock management
Tibetan Sheep		Recommended for feeding
		concentrate feed along with mineral
		mixture and salt.
		Hay feeding is recommended.
Yak		Recommended for feeding
		concentrate feed along with mineral
		mixture and salt.
		♦
		Hay feeding is recommended.
		Trimming of hair is recommended
		during summer season
Sheep and Goat		Breeding of the sheep/goat should be
		done 24-30 hr. after onset of heat.
		♦ Feeding of concentrate feed along
		with jaggery, mineral mixture and salt
		is recommended.
		Periodic application of fly repellents
		and/or netting of dung pit is
		recommended.
Cattle		Farmers are advised to look for heat
Cattle		sign especially during early morning
		or late evening and ensure breeding
		of the dairy cattle within 12-18 hours
		after onset of heat symptoms
		Balanced feeding of dairy animals
		and allow calf suckling immediately
		after parturition is recommended.
		Colostrum (first three days milk)
		feeding to new born calf for first three
		days of life should be ensured.
		Full hand milking should be
		practiced.

after parturition for Later on, com	plete milking at should be practiced
after parturition for Later on, com	snouid de practiced
Later on, com	<del>-</del>
	-
subsequent day is	
	ntural and electrical)
osis, should be provide	ed to adult birds for
Ranikh optimum egg prod	
et ♦ Frequent raking a	and liming of deep
disease litter materials is r	recommended.
♦ Inclusion of tur	rmeric powder @
10g/kg in poultry	feed for prevention
of Coccidiosis is r	ecommended.
♦ Maintenance of t	prooder temperature
	ne help of electrical
bulbs for initial or	
Ranikhet vaccinat	ion for poultry at 5-
	3-30 days of age is
highly recommend	
	t and multi vitamin
supplementation	is strongly
	o optimize egg
production.	o optimize egg
◆ Occasional	spraying of
ectoparasiticides	viz.,
	rmethrin @ 1% v/v
in water is recomm	
Pig All stages Swine    Swine    Fever    Weaning is recon	
	crossbreds and 10
weeks for indigend	1 0
	ine at the age of 3
	by annual booster
dose is recommen	
◆ Critical heat detection	=
·	nd late evening is
recommended.	
Farmers can inc	
locally available	
	g pigs to reduce the
cost of feeding	

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



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

#### **PERIOD:**

#### **7<sup>th</sup> SEPTEMBER to 11<sup>th</sup> SEPTEMBER' 2019**

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





#### ISSUED ON 6th September 2019

#### 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

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

<b>↓Parameter/Date</b> →	07/09/2019	08/09/2019	09/09/2019	10/09/2019	11/09/2019
Rainfall (mm)	Light rainfall	Light rainfall	Light rainfall	Moderate rainfall	Moderate rainfall
Max Temp ( <sup>0</sup> C)	28	29	29	27	26
Min Temp ( <sup>0</sup> C)	20	20	20	19	19
Sky condition	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	90	90	91	92	93
Min RH (%)	80	80	82	84	85
Wind Speed (KmpH)	003	003	004	002	002
Wind Direction (deg)	NE	NE	NE	NE	NE

Northerly- N, North-Easterly- E, South-Easterly- S, South-Westerly- S, South-Westerly- N, Westerly- N, North-westerly- N, North

	Weather for preceding week					
Date Rainfall Max. Temp Min. Temp						
	(mm)	(°C)	(°C)			
03/09/2019	N/A	27.9	21.0			
04/09/2019	N/A	26.3	19.8			
05/09/2019	N/A	26.6	19.5			

- There will be chances of light rainfall
- Max temp may be varying from 26-28°C, whereas, Min temp may vary from 19-20°C
- > Sky will remain generally cloudy
- > Max RH is likely to be 90-93%, whereas, Min RH may vary from 80-85 %
- > Wind speed may likely vary from 2-4 km/hr.
- > Wind may blow from North easterly direction.
- > Weekly cumulative rainfall= 51 mm

- **▶** Bunding at terrace should be done to reduce nutrient losses due to heavy rainfall
- **▶** Keep the field ready for black gram (pahelo dal) sowing
- Crop field should be free from weed, during flowering stage
- Jalkund should be dug out for rain water harvesting.
- ▶ Spraying of bio pesticides (neem based formulation 1500 ppm @5ml/lit. and copper oxychloride 50%WP @ 2.5g/lit.) at weekly interval for insect pest and diseases management
- **▶** Regular supplementation of vitamins and mineral mixture to the livestock is recommended to improve the productive and reproductive performance of animals.
- → Milching dairy cow should be feed 70-80 ml calcium daily for better milk yield and good health
- FMD (foot and Mouth Disease) vaccination should be given to cattle, goat and pig
- **▶** Enterotoxaemia & PPR vaccine is highly recommended for goat

Name of the	Stage	Cultural p	ractices/		Agro-Met Advisories	
crop/Animal		Pest/ Diseases				
	Agricultural and Horticultural crops:					
Maize	Transplanting of	completed	Army	<b>\limits</b>	Harvest the crop in bright sunny days	
	(vegetative	stage)	worm		Green cobs can be harvested to sell in	
					the market.	
Rice	Main field prepa	aration and		<b>\limits</b>	Apply <i>Azolla</i> in the paddy field	
	transplan	ting		<b>*</b>	Complete the first weeding	
Black gram	Land			<b>\line{\pi}</b>	After harvesting of maize plough the	
(Pahelo dal)	preparati				land and apply well decomposed	
	sowing	g			FYM @ 2.0 ton/ ha + vermicompost	
					0.5 ton/ha + neem cake 100 kg/ha	
					Sow the seeds at spacing of 30-45 cm	
					× 15 cm.	

				Seed treatment with Trichoderma sp.
				@ 5-10 g/kg seed and soil treatment
				@ 2.5 kg mixed with 50 kg FYM is
				recommended.
Rjmash/Cowpe	Land preparation/			Prepared the land & add 10-15
a	Sowing			tonnes/ha FYM in the pits or lines in
				raised bed, 10-15 days before
				planting.
Ginger/	Tillering stage			Remove the weeds without breaking
Turmeric				the sprouted ginger tillers.
				Drench the ginger field with cow
				urine at 1:4 (urine: water) ratio or
				fresh cow dung slurry at fortnightly
				interval
				Start spraying copper oxy chloride @
				0.25 % at weekly interval
Large	Planting		<b>\lambda</b>	A 2 years old nursery suckers should
cardamom	C			be planted in the main field
				A spacing of 1.8×1.8 m <sup>2</sup> should be
				maintained.
			<b>\oint{\oint}</b>	Young white coloured roots should
				not be destroy while planting, while
				old roots should trimmed out.
Daulas labas de	X/		_	Westing and internal arranging
Early kharif	Vegetative growth		~	Weeding and intercultural operation should be done
vegetables				snould be done
Red cherry	Vegetative	Blight	<b>\langle</b>	Plants should be keep weed free and
pepper/Brinjal	C			avoid water stagnation
1 11 3				Spraying of COC @ 2-3 ml/lit. at
				weekly interval
				Five spray of neem based formulation
				1500 ppm @ 5 ml/1 lit. of weekly
				interval for controlling of <i>Aphids</i>
Cole crops/	Nursery preparation		<b>\langle</b>	Start preparation of nursery beds for
Tomato	, FF			early and late kharif tomato
				Use early varieties of cabbage (early
				ball) cauliflower (white excel),
				broccoli (Aishwarya) and tomato
				(varieties Arka rakshak, Arka samrat,
				and All rounder
			<b>\oint{\oint}</b>	Apply FYM 2 kg/m <sup>2</sup> , neem cake @
				200 g/m <sup>2</sup> , Trichoderma@ 1 % should
				be incorporated in soil during nursery
				bed preparation.
				oca preparation.

		Nursery bed should be prepared
		inside the poly tunnel/rain shelter
		system.
Sikkim	Planting/fruiting	Keep the orchard weed free
Mandarin		<b>♦</b> Digging the pit of 3 feet × 3 feet × 3
		feet for transplanting new saplings
		Top soil of the pit should be mixed
		with FYM @20 kg/pit
	Animal Sciences and	livestock management
Tibetan Sheep		Recommended for feeding
		concentrate feed along with mineral
		mixture and salt.
		Hay feeding is recommended.
Yak		Recommended for feeding
		concentrate feed along with mineral
		mixture and salt.
		Hay feeding is recommended.
		Trimming of hair is recommended
		during summer season
Sheep and Goat		♦ Breeding of the sheep/goat should be
1		done 24-30 hr. after onset of heat.
		♦ Feeding of concentrate feed along
		with jaggery, mineral mixture and salt
		is recommended.
		◆ Periodic application of fly repellents
		and/or netting of dung pit is
		recommended.
		1333,121,013,01
G1		
Cattle		Farmers are advised to look for heat
		sign especially during early morning
		or late evening and ensure breeding
		of the dairy cattle within 12-18 hours
		after onset of heat symptoms
		Balanced feeding of dairy animals
		and allow calf suckling immediately
		after parturition is recommended.
		Colostrum (first three days milk)
		feeding to new born calf for first three
		days of life should be ensured.
		Full hand milking should be
		practiced.

			<u> </u>	1 , 11 ,
				Frequent incomplete milking at nterval of 4hrs should be practiced
				after parturition for minimum 1 week.
				Later on, complete milking in
				subsequent day is recommended.
Poultry		Coccidi		16 hrs of light (natural and electrical)
1 Outri y		osis,		should be provided to adult birds for
		Ranikh		optimum egg production.
		et		Frequent raking and liming of deep
	and the same of	disease		itter materials is recommended.
		arscase		Inclusion of turmeric powder @
				10g/kg in poultry feed for prevention
				of Coccidiosis is recommended.
				Maintenance of brooder temperature
				for chicks with the help of electrical
				oulbs for initial one month.
			<b>♦</b> H	Ranikhet vaccination for poultry at 5-
				7 days and at 28-30 days of age is
				nighly recommended.
				Calcium/shell grit and multi vitamin
				supplementation is strongly
			r	recommended to optimize egg
			ŗ	production.
			<b>(</b>	Occasional spraying of
			e	ectoparasiticides viz.,
			Ċ	deltamethrin/cypermethrin @ 1% v/v
			i	n water is recommended.
Pig	All stages	Swine	<b>♦</b> H	Keep floor dry to avoid skin diseases.
		fever	◊ /	Weaning is recommended at the age
			C	of 8 weeks for crossbreds and 10
			V	weeks for indigenous pigs.
			<b>&gt;</b> S	Swine fever vaccine at the age of 3
			r	months followed by annual booster
			C	dose is recommended.
			<b>(</b>	Critical heat detection of sow/ gilt in
				early morning and late evening is
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				(60%) for feeding pigs to reduce the
			C	cost of feeding

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



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

#### PERIOD:

#### 7th SEPTEMBER to 11th SEPTEMBER' 2019

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





#### ISSUED ON 6th September 2019

#### 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

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

<b>↓Parameter/Date</b> →	07/09/2019	08/09/2019	09/09/2019	10/09/2019	11/09/2019
Rainfall (mm)	Light rainfall	Light rainfall	Light rainfall	Moderate rainfall	Moderate rainfall
Max Temp ( <sup>0</sup> C)	27	27	28	27	26
Min Temp ( <sup>0</sup> C)	18	18	18	18	18
Sky condition	Cloudy	Generally cloudy	Generally cloudy	Generally cloudy	Generally cloudy
Max RH (%)	91	90	91	92	93
Min RH (%)	82	80	82	83	85
Wind Speed (KmpH)	004	004	003	002	002
Wind Direction (deg)	N	N	S	S	N

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

	Weather for preceding week					
Date Rainfall Max. Temp Min. Temp						
	(mm)	(°C)	(°C)			
03/09/2019	001	25.7	18.7			
04/09/2019	000	25.6	18.6			
05/09/2019	004	26.5	18.2			

- > Probability of light rainfall
- Max temp may be varying from 26-28°C, whereas, Min temp may vary from 0-18°C
- > Sky will remain generally cloudy
- Max RH is likely to be 90-93%, whereas, Min RH may vary from 80-85 %
- > Wind speed may likely vary from 2-4 km/hr.
- > Wind may blow from northerly direction
- > Weekly cumulative rainfall= 66 mm

- **▶** Bunding at terrace should be done to reduce nutrient losses due to heavy rainfall
- **▶** Keep the field ready for black gram (pahelo dal) sowing
- **▶** Crop field should be free from weed, during flowering stage
- **▶** Jalkund should be dug out for rain water harvesting.
- ▶ Spraying of bio pesticides (neem based formulation 1500 ppm @5ml/lit. and copper oxychloride 50%WP @ 2.5g/lit.) at weekly interval for insect pest and diseases management
- Regular supplementation of vitamins and mineral mixture to the livestock is recommended to improve the productive and reproductive performance of animals.
- → Milching dairy cow should be feed 70-80 ml calcium daily for better milk yield and good health
- FMD (foot and Mouth Disease) vaccination should be given to cattle, goat and pig
- Enterotoxaemia & PPR vaccine is highly recommended for goat

Name of the	Stage	Cultural p	ractices/		Agro-Met Advisories
crop/Animal		Pest/ Dis	eases		
Agricultural and Horticultural crops:					
Maize	Transplanting of	completed	Army	<b>\limits</b>	Harvest the crop in bright sunny days
	(vegetative	stage)	worm		Green cobs can be harvested to sell in
					the market.
Rice	Main field prepa	aration and			Apply <i>Azolla</i> in the paddy field
	transplan	ting		<b>*</b>	Complete the first weeding
Black gram	Land			<b></b>	After harvesting of maize plough the
(Pahelo dal)	preparati	on/			land and apply well decomposed
	sowing	g			FYM @ 2.0 ton/ ha + vermicompost
					0.5 ton/ha + neem cake 100 kg/ha
					Sow the seeds at spacing of 30-45 cm
					× 15 cm.

			@ @	ed treatment with Trichoderma sp. 5-10 g/kg seed and soil treatment 2.5 kg mixed with 50 kg FYM is ommended.
Rjmash/Cowpe a	Land preparation/ Sowing		ton rais	epared the land & add 10-15 nes/ha FYM in the pits or lines in sed bed, 10-15 days before nting.
Ginger/ Turmeric	Tillering stage		the Dre urin free inte	move the weeds without breaking sprouted ginger tillers. ench the ginger field with cow ne at 1:4 (urine: water) ratio or sh cow dung slurry at fortnightly erval art spraying copper oxy chloride @ 5 % at weekly interval
Large cardamom	Planting		<ul><li>♦ A 2</li><li>be</li><li>♦ A</li><li>ma</li><li>♦ Yo</li><li>not</li></ul>	2 years old nursery suckers should planted in the main field spacing of 1.8×1.8 m <sup>2</sup> should be intained.  ung white coloured roots should to be destroy while planting, while troots should trimmed out.
Early kharif vegetables	Vegetative growth			eeding and intercultural operation ould be done
Red cherry pepper/Brinjal	Vegetative	Blight	avo Spr we Fiv 150	ints should be keep weed free and bid water stagnation raying of COC @ 2-3 ml/lit. at ekly interval expray of neem based formulation 00 ppm @ 5 ml/l lit. of weekly erval for controlling of <i>Aphids</i>
Cole crops/ Tomato	Nursery preparation		ear  Use bal bro (va and Ap 200 be bed	art preparation of nursery beds for ally and late kharif tomato be early varieties of cabbage (early l) cauliflower (white excel), accoli (Aishwarya) and tomato brieties Arka rakshak, Arka samrat, al All rounder ply FYM 2 kg/m², neem cake @ 0 g/m², Trichoderma@ 1 % should incorporated in soil during nursery all preparation.

			inside the poly tunnel/rain shelter
			system.
Sikkim	Planting/fruiting	•	Keep the orchard weed free
Mandarin		•	Digging the pit of 3 feet × 3 feet × 3
			feet for transplanting new saplings
			Top soil of the pit should be mixed
			with FYM @20 kg/pit
	Animal Sciences and	livestock n	management
Tibetan Sheep		•	Recommended for feeding
			concentrate feed along with mineral
			mixture and salt.
		•	Hay feeding is recommended.
Yak		•	Recommended for feeding
			concentrate feed along with mineral
			mixture and salt.
		•	Hay feeding is recommended.
			Trimming of hair is recommended
			during summer season
Sheep and Goat		· ·	Breeding of the sheep/goat should be
			done 24-30 hr. after onset of heat.
		•	Feeding of concentrate feed along
			with jaggery, mineral mixture and salt
			is recommended.
			Periodic application of fly repellents
			and/or netting of dung pit are
			recommended
C 11			
Cattle		1	Farmers are advised to look for heat
			sign especially during early morning
			or late evening and ensure breeding
			of the dairy cattle within 12-18 hours
			<ul><li>after onset of heat symptoms</li><li>Balanced feeding of dairy animals</li></ul>
			•
			and allow calf suckling immediately after parturition is recommended.
			Colostrum (first three days milk)
			feeding to new born calf for first three
			days of life should be ensured.
			Full hand milking should be
			practiced.
			Frequent incomplete milking at
			interval of 4hrs should be practiced
			after parturition for minimum 1 week.
			and parturnon for minimum I week.

			Later on, complete milking in subsequent day is recommended.
Poultry		Coccidi osis, Ranikh et disease	subsequent day is recommended.  ◆ 16 hrs of light (natural and electrical) should be provided to adult birds for optimum egg production.  ◆ Frequent raking and liming of deep litter materials is recommended.  ◆ Inclusion of turmeric powder @ 10g/kg in poultry feed for prevention of Coccidiosis is recommended.  ◆ Maintenance of brooder temperature for chicks with the help of electrical bulbs for initial one month.  ◆ Ranikhet vaccination for poultry at 5-7 days and at 28-30 days of age is highly recommended.  ◆ Calcium/shell grit and multi vitamin supplementation is strongly recommended to optimize egg production.  ◆ Occasional spraying of ectoparasiticides viz., deltamethrin/cypermethrin @ 1% v/v
Pig	All stages	Swine fever	in water is recommended.  Neep floor dry to avoid skin diseases.  Weaning is recommended at the age of 8 weeks for crossbreds and 10 weeks for indigenous pigs.  Swine fever vaccine at the age of 3 months followed by annual booster dose is recommended.  Critical heat detection of sow/ gilt in early morning and late evening is recommended.  Farmers can incorporate low cost locally available feed resources (60%) for feeding pigs to reduce the cost of feeding

Name	Designation	Department
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