

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Imphal West***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Imphal West (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 100 % (max) & 96 % (min). The average wind speed may be 2-4 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	<ul style="list-style-type: none"> - Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Senapati***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Senapati (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-27 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 99 % (max) & 97 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	<ul style="list-style-type: none"> - Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
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Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Tamenglong***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Tamenglong (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-27 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 100 % (max) & 97 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

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2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
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5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
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		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
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Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
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Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



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Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
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		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
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		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
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**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Thoubal***Past weather for the of Imphal West (9th to 11th July, 19):**

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		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
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Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Ukhrul***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Ukhrul (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 99 % (max) & 96 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	<ul style="list-style-type: none"> - Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Bishnupur***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Bishnupur (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 99 % (max) & 94 % (min). The average wind speed may be 2-4 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	<ul style="list-style-type: none"> - Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Chandel***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Chandel (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 98 % (max) & 92 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
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		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Churachandpur***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Churachandpur (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 99 % (max) & 95 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	<ul style="list-style-type: none"> - De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	<ul style="list-style-type: none"> - As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	<ul style="list-style-type: none"> - Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	<ul style="list-style-type: none"> - Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.

Fishery:

Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 12th July, 2019*District: Imphal East***Past weather for the of Imphal West (9th to 11th July, 19):**

38.8 mm rainfall was observed during the past three days. The skies remained overcast. Maximum temperature ranged from 25.5 – 28.6 °C and minimum of 22.3 – 23.6 °C. Mean relative humidity of 94 % max & 86.0 % min was recorded in the past three days & average wind speed was 1.1 – 1.9 km/ hr.

Weather forecast for Imphal East (13th to 17th July, 2019):

Likely to have fairly widespread moderate to heavy rains upto Sunday then light rains thereafter. The sky will remain mainly cloudy to overcast with max. temp. 26-29 °C & mini. temp. 22-23 °C. Relative humidity may reach upto 98 % (max) & 90 % (min). The average wind speed may be 2-5 km/hr.

General Advisory:

1. Harvest rain water wherever possible to cope up water shortage problems after rains.
2. Monitor insect pest infestation in the crop field.
3. Proper drainage systems may be made in and around the crop fields and near the sheds of birds and animals to avoid water logging.
4. Add sanitizer in drinking water for birds and animals. Avoid leakage of rain water in sheds.
5. Avoid draining of muddy water in culture ponds, also liming may be done @ 300kg/ha to improve water quality in ponds. Raise the level of ridges around the fish ponds.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Community nursery or Dapog nursery or Dry nursery beds may be prepared for raising nursery upto 15 th July (plot size: 4 x 20 ft for transplanting in a sangam). Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm. -Treat seeds with Carbendazim @ 2g/ kg seeds.
		Thrips	- Use Blue Sticky Cards@ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- After rains, spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation		- Avoid water logging if it rains heavy.
		Fall Army Worm	- Apply Emamectin benzoate@ 4g/litre water or Spinosad@ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Avoid water logging during rainy days. - Second hand weeding may be done after rains nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		Red hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide after rains.
Millet	Sowing		- Treat seeds with Carbendazim @ @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Khasi Mandarin	For grown up trees		After rains, apply 450 g Urea, 1000 g SSP, 400 g MOP and 50 g Borax per plant. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litres of water and Imidachloprid @ 5 ml/10 lit water.
Kachai Lemon			After rains, apply 400 g Urea, 550 g SSP, 250 g MOP and 50 g Borax. Spray Ridomil @ 2.5 g/lit or Carbandazim @ 10 g/15 litre water and



			Imidachloprid @ 5 ml/10 lit water.
Banana	Planting		<ul style="list-style-type: none"> - After rains, plant banana at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m for dwarf varieties. - Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. - Plant one sucker (with broad base & narrow leaves) per pit. In newly established orchard, intercropping with cabbage/ cauliflower/ radish/ carrot or spinach may be followed.
Cucurbits	Fruiting to harvesting		<ul style="list-style-type: none"> - Support/ stack properly to avoid any loss due to contact of fruits with soil and to avoid overcrowding of leaves/ branches.
		Powdery mildew	<ul style="list-style-type: none"> - If there is infestation of Powdery mildew in large scale, first harvest mature fruits and spray Bayleton @ 7 gm/ lit of water after rains.
Colocasia	Corm formation		<ul style="list-style-type: none"> - Weeding and earthing up of the soil at the base of the plant may be done after rains to enhance corm development. Drain out excess water. - Spray D-M 45 @ 2g/lit of water to protect from leaf spot.

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		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	<ul style="list-style-type: none"> - Ofloxacin/ Ornidazole (O₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	<ul style="list-style-type: none"> - Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	<ul style="list-style-type: none"> - Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	<ul style="list-style-type: none"> - De-worming with suitable Anthelmintics against Faciolasis.
		Endoparasite/ Ectoparasite	<ul style="list-style-type: none"> - Inject Parid @ 1 ml/ 50 kg body weight.
		Management	<ul style="list-style-type: none"> - Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	<ul style="list-style-type: none"> - Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
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(I. Meghachandra Singh)
Nodal Officer, GKMS