

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019

District: Ukhrul

Past weather for the of Imphal West (9th and 10th October, 2019):

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Ukhrul (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 26-28 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 98 % (max) & 71 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.
Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.



Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactum or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.
Fishery:			
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019**District: Bishnupur****Past weather for the of Imphal West (9th and 10th October, 2019):**

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Bishnupur (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 29-34 °C & mini. temp. 17-22 °C. Relative humidity may reach upto 99 % (max) & 69 % (min). The average wind speed may be 2-5 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019

District: Chandel

Past weather for the of Imphal West (9th and 10th October, 2019):

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Chandel (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 27-28 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 97 % (max) & 76 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
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		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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Weather forecast for Churachandpur (12th to 16th October, 2019):

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Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
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Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019*District: Imphal East***Past weather for the of Imphal West (9th and 10th October, 2019):**

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Imphal East (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 28-29 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 97 % (max) & 66 % (min). The average wind speed may be 4-6 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019*District: Imphal West***Past weather for the of Imphal West (9th and 10th October, 2019):**

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Imphal West (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 28-29 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 95 % (max) & 57 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019

District: Senapati

Past weather for the of Imphal West (9th and 10th October, 2019):

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Senapati (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 26-27 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 99 % (max) & 77 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.
Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.



Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permangnate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactum or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.
Fishery:			
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019*District: Tamenglong***Past weather for the of Imphal West (9th and 10th October, 2019):**

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Tamenglong (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 26-28 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 98 % (max) & 72 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 11th October, 2019*District: Thoubal***Past weather for the of Imphal West (9th and 10th October, 2019):**

3.4 mm rainfall was observed during the past two days. The skies remained partly cloudy to mainly cloudy. Maximum temperature ranged from 25.3–29.4 °C and minimum of 19.2–21.0 °C. Mean relative humidity of 91.0 % max & 63.5 % min was recorded in the past five days & average wind speed was 1.2–2.3 km/ hr.

Weather forecast for Thoubal (12th to 16th October, 2019):

Likely to have no rains upto Wednesday. The sky will remain partly cloudy to mainly cloudy with max. temp. 28-29 °C & mini. temp. 18-19 °C. Relative humidity may reach upto 99 % (max) & 82 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Monitor insect pest in the crop field regularly to reduce loss. Provisions may be taken up to conserve soil moisture and avoid loss of water from water bodies. Use water economically to ensure its availability in coming months.
2. For the fields where rice had failed due to uneven distribution of rainfall during the growing season, cultivation of Blackgram (urad dal)/ Lentil (masoor dal)/ Green gram (moong dal)/ Lathyrus (kachari) may be done as contingency crop by the mid of November so as to reduce economic stress of farmers. Treat seeds with Carbendazim@ 2g/ kg seeds before sowing.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Flowering and Grain filling to maturity		- Maintain water level of 5-8 cm in the crop field. Monitor insect pest infestation. Weeding may be done.
		Rice false smut	Spray Propiconazole @ 2ml/ litre water or Kocide @ 5g/15lit water (spray after 2:00 pm only) to the crops in flowering stage.
		Blast	Spray Tricyclazole 75WP @ 9 g/ 15 L water or Hexaconazole @ 2ml/ L water.
		Brown Plant Hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.
		Aphid, mealy bugs	Spray Fipronil @ 2g/15 litres or Imidachloprid 17.8 SL @ 7ml/ 15litres of water.
		Bacterial leaf blight	Spray Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
		Neck Blast	- Spray Tricyclazole 75% @ 10g/15 litres of water.
Soybean/ Groundnut/ Rice Bean	Pod formation to maturity		- Monitor insect pest infestation. Weeding may be done proper utilization of nutrients and moisture by the crop and avoid insect pest.
Millet/ Blackgram	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days after sowing for proper utilization of nutrients and moisture by the crop and avoid insect pest.
Potato	Land preparation to planting		- Land preparation for planting potato may be done as soon as optimum soil moisture for land preparation is attained. Ploughing and planking may be done to attain well pulverized and leveled seed bed. Apply 20-30tons of well decomposed FYM at least two weeks before planting. - Select healthy and pure seeds of high yielding variety, free from insect pest. Treat seeds with 5% Dithane M-45 to 10 min before planting. 30 to 50g tuber seeds may be planted at row to row spacing of 55-60cm and plant to plant spacing of 20-25 cm. Seed rate is 20-25 quintals/ hectare.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in <i>RC-Seed Bin</i> 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
Banana			De-suckering and earthing-up - Maintain three suckers (including mother plant). Uproot excess suckers. - Remove dried/ diseased or decayed leaves. - Earthing-up should be done to avoid water logging at the base of the plant. - Spray 0.3% Phosphamidon around the base of the plant against rhizome weevil and also Carbendazim 50% WP @ 2 g/lit of water as prophylactic measure against Anthracnose.



Onion	Nursery raising		- Prepare raised nursery beds, after sowing it must be covered with paddy straw or gunny bags. These must again be removed after 5-7 days as soon as the seeds germinate.
Broad bean/ Pea/ French bean	Land preparation/ seed collection to sowing		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
Mango	Appearance of new flush in bearing trees		At this stage, apply 50g Urea + 100g DAP + 40g MOP in the soil 1 ½ feet away from the trunk or plant growth promoting rhizobium bacteria (PGPR) or organic formulation like Jivamrut (Mix 10 kg cowdung + 10 litres cow urine + 2 kg jiggery + 2 kg of pulse grain flour + 1kg of live forest soil in 200 litres of water. Ferment for 5-7 days. Stir the formulation three times a day. Use it for 1 acre with irrigation water.

Animal Sciences

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Deworming	- Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			- Give green grasses sufficiently & mix with ground maize/ rice bran.
		Care & management	Proper ventilation must be provided to protect excessive heat during day time. Use water sanitizer in drinking water/potassium permanganate (few grains). Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- 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	Fascioliasis	- De-worming with suitable Anthelmintics against Faciolasis.
		Deworming	Give Rafoxamide plus Levamisole (Rafox plus)/ Ranizole suspension @ 1ml/ 2kg body weight or 5.5ml/ 10 kg body weight (Ranizole).
		Management	- Provide wholesome water. - Give Amoxyline/ Salbactam or any antibiotic for 5 days.
Goat	All age groups except three months or below	Fascioliasis	- Give Tolzan-F in association with vitamins like Livozyme twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme daily.

Fishery:

Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime @ 25-30kg/ ha every month. Broadcast Green AQ @2 litre/ha by mixing with water.
		Feed	Provide feed 2 times @ 5 % body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.