

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019*District: Thoubal***Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Thoubal (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-28 °C & mini. temp. 13-15 °C. Relative humidity may reach upto 97 % (max) & 64 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Kharif Rice</b>	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
<b>Rapeseed</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
<b>Field pea</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
<b>Lentil</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
<b>Potato</b>	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
<b>Millet/ Blackgram</b>	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
<b>Seed storage</b>	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>

<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Ginger/ Turmeric</b>	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
<b>Spinach beet (Palak)</b>	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Ukhrul

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Ukhrul (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 24-26 °C & mini. temp. 12-13 °C. Relative humidity may reach upto 93 % (max) & 53 % (min). The average wind speed may be 4-5 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
Rapeseed	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
Field pea	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
Lentil	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
Potato	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
Millet/ Blackgram	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
Seed storage	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
Spinach beet (Palak)	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Bishnupur

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Bishnupur (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-28 °C & mini. temp. 13-15 °C. Relative humidity may reach upto 98 % (max) & 59 % (min). The average wind speed may be 2-4 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
Rapeseed	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
Field pea	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
Lentil	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
Potato	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
Millet/ Blackgram	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
Seed storage	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
Spinach beet (Palak)	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>





			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Chandel

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Chandel (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 25-27 °C & mini. temp. 13-14 °C. Relative humidity may reach upto 96 % (max) & 58 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

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2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

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Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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Lentil	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
Potato	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
Millet/ Blackgram	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
Seed storage	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
Spinach beet (Palak)	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019*District: Churachandpur***Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Churachandpur (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-28 °C & mini. temp. 13-15 °C. Relative humidity may reach upto 96 % (max) & 43 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Kharif Rice</b>	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
<b>Rapeseed</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
<b>Field pea</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
<b>Lentil</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
<b>Potato</b>	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
<b>Millet/ Blackgram</b>	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
<b>Seed storage</b>	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Ginger/ Turmeric</b>	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
<b>Spinach beet (Palak)</b>	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Imphal East

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Imphal East (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-28 °C & mini. temp. 13-15 °C. Relative humidity may reach upto 92 % (max) & 54 % (min). The average wind speed may be 5-6 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Kharif Rice</b>	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
<b>Rapeseed</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
<b>Field pea</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
<b>Lentil</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
<b>Potato</b>	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
<b>Millet/ Blackgram</b>	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
<b>Seed storage</b>	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Ginger/ Turmeric</b>	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
<b>Spinach beet (Palak)</b>	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Imphal West

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Imphal West (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 26-28 °C & mini. temp. 13-14 °C. Relative humidity may reach upto 92 % (max) & 43 % (min). The average wind speed may be 2-4 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Kharif Rice</b>	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
<b>Rapeseed</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
<b>Field pea</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
<b>Lentil</b>	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
<b>Potato</b>	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
<b>Millet/ Blackgram</b>	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
<b>Seed storage</b>	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Ginger/ Turmeric</b>	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
<b>Spinach beet (Palak)</b>	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>





			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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SMS:

Lakliba Yumjakeisa faoba nong chudaba yai. Hangam, Hawaii Tharak,  
Hawaii Masoori, Alu, Tilhou amadi Kobi (late variety) thadokpiba yarani.  
Tha 9 shuraba shing/ yaingang tanthokpiba yarani.

(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Senapati

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Senapati (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 24-25 °C & mini. temp. 12-13 °C. Relative humidity may reach upto 94 % (max) & 51 % (min). The average wind speed may be 4-5 km/hr.

**General Advisory:**

1. If soil conditions permit inter-culture operations may be done.
2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
Rapeseed	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
Field pea	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
Lentil	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
Potato	Planting to vegetative		<ul style="list-style-type: none"> <li>- During final stages of land preparation for planting potato apply 20-30tons of well decomposed FYM per hectare at least two weeks before planting.</li> <li>- 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.</li> </ul>
Millet/ Blackgram	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
Seed storage	Post-harvest Management		<ul style="list-style-type: none"> <li>- 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.</li> </ul>

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger/ Turmeric	Rhizome formation		<ul style="list-style-type: none"> <li>- 9 months old crops may be harvested. Harvested crop must be kept under rain shelter sheds for curing.</li> </ul>
Spinach beet (Palak)	Vegetative		<ul style="list-style-type: none"> <li>- Well drained soil is best for growing spinach beet.</li> <li>- Avoid damping off by adding Captan 50WP in the soil of bed.</li> <li>- Seed rate is 100-120g/ 100 sq m. If broadcasting is done, double the dose is required.</li> </ul>



			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
<b>Cauliflower</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 50 kg urea in two splits dose during 20-40 days after transplanting for main season crops.

**Animal Sciences**

\* Protect birds and animals from cold.

Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All susceptible age groups	Care and Management	Walls of sheds should be covered with polythene sheets/hessian cloths during the night.
		Coccidiosis	Give Coccimar @ 2g/litre of drinking water for 5-7 days along with glucose.
		Deworming	Use Ventrimizole @ 1g in 1 litre of drinking water for 3 days.
<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Management	Sheds must be kept dry. Use bedding materials.
<b>Goat</b>	All age groups except three months or below	Vaccination	Vaccinate against B.Q./ H.S. this time. Lambs should be vaccinated against Enterotoxaemia.
		Deworming	Give Ranizole suspension @ 3ml/ 10 kg body weight.
		Shearing for wool	Sheep should be sheared during this month.

**Fishery:**

\* Harvest rain water to maintain fish pond water.

<b>Carp culture</b>	- Maintain water level at a depth of 1.0m to 1.5m. Fish stocking may be done in small scale. Feeds should be provided @ 3 % body weight per day. Harvesting of fishes may be done. Select disease free fishes to be stocked as brooder.
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(I. Meghachandra Singh)  
Scientist i/c, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 15<sup>th</sup> November, 2019

District: Tamenglong

**Past weather for the of Imphal West (12<sup>th</sup> to 14<sup>th</sup> November, 2019):**

0.7 mm rainfall was observed during the past three days. The skies remained foggy during morning hours with dense fog on 13<sup>th</sup> Nov and mainly clear during afternoon hours. Maximum temperature ranged from 27.5-28.0 °C and minimum of 14.2-18.6 °C. Mean relative humidity of 96.67 % max & 56.33 % min was recorded in the past three days & average wind speed was 1.1-2.3 km/ hr.

**Weather forecast for Tamenglong (16<sup>th</sup> to 20<sup>th</sup> Nov, 2019):**

Likely to have no rain upto Wednesday. The sky will remain mainly clear to partly cloudy with max. temp. 25-26 °C & mini. temp. 12-13 °C. Relative humidity may reach upto 93 % (max) & 45 % (min). The average wind speed may be 4 km/hr.

**General Advisory:**

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2. Harvest mature crops. Thresh clean and sundry seeds properly in sun before storage. Store seeds in RC Seed Bin.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Harvesting and post-harvest		<ul style="list-style-type: none"> <li>- Sundry the harvested panicles erect for 5-7 days. Turning the heap of panicles while drying can help in better grain filling.</li> <li>- Harvested crop must be well threshed. Clean and sundry seeds properly before storage.</li> </ul>
Rapeseed	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Zero tillage rapeseed may be sown at 30 cm row spacing when the soil creates impression with forefinger.</li> <li>- Apply 65kg Urea + 188kg SSP + 50kg MOP as basal dose before sowing. Recommended variety- M-27 and PM-27. Seed rate is 10-12 kg/ ha. Treat seeds with Mancozeb @2g/kg seed and dry for 30 mins in the shade then sow for the control of white rust and downey mildew at seedling stage.</li> </ul>
Field pea	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Carbendazim @2g/ kg seeds before sowing.</li> <li>- Land preparation may be done for sowing.</li> <li>- Sowing may be done at a spacing of 30cm X 10-15cm. Recommended variety - Rachana. Seed rate is 75 kg/ hectare.</li> </ul>
Lentil	Sowing to vegetative		<ul style="list-style-type: none"> <li>- Procure disease free good variety of crop from a reliable source and treat with Thiram + Carbendazim (1:1) @2.5g/ kg seeds before sowing at minimum tillage.</li> <li>- Apply 4-5 t of FYM/ ha at least 15 days before sowing. Also apply 43.5kg Urea, 250kg SSP and 67 kg MOP per hectare as basal dose.</li> <li>- Seed rate is 50-60 kg of bold seeds or 30-40 kg of small seeds/ ha.</li> <li>- Spacing may be 30x10 cm if planted in rows.</li> </ul>
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Millet/ Blackgram	Maturity to harvesting		<ul style="list-style-type: none"> <li>- Harvest mature crops. Sundry properly before storage.</li> </ul>
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			- Keep soil moist during vegetative stage. Monitor insect pest regularly.
<b>Onion</b>	Nursery to vegetative		- Apply Captan 50 WP @ 2g/ litre water during final land preparation as preventive measures against soil borne diseases. - For 25 sq. m area we need ½ kg seeds. - Check that the new sprouts/ young plants in nursery beds are not damaged. 45-60 days old seedlings may be transplanted. - Keep soil moist during vegetative stage. Weeding may be done.
<b>Broad bean/ Pea/ French bean</b>	Vegetative to flowering and fruiting		Prepare land for sowing after rains. Procure healthy disease free seeds for sowing. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.
<b>Cabbage</b>	Transplanting to vegetative		- Apply 50 kg DAP, 25kg MOP and 10 cart loads of FYM/ sangam as basal dose followed by 46 kg Urea in two splits dose after 20-40 days of transplanting.
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**Animal Sciences**

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<b>Pig</b>	Above 3 months of age	Deworming	Give Morantel citrate tablet (Banminth) @ 15mg/ kg body weight.
		Skin disease	Sprayer of <b>Anti-Psoroptic</b> may be used.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
<b>Cattle</b>	Above 3 months of age	Vaccination	Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. These cases may be encountered during this period. If observed, immediate treatment using appropriate drugs with the help of Consultant must be advocated to infected animals.
		Tick	Use Butox liquid @ 2ml/ litre water twice a week while brushing animals.
		Deworming	De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
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