

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019*District: Thoubal***Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Thoubal (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-30 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 87 % (min). The average wind speed may be 3-6 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<b>Field Crops</b>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Kharif Rice</b>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<b>Horticulture Crops</b>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Ginger</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019

District: Ukhrul

**Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Ukhrul (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-30 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 79 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<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>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<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</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1.Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019*District: Bishnupur***Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Bishnupur (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-31 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 85 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<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>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythothrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.

<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</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>





			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1.Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakhoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019

District: Chandel

**Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Chandel (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-30 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 82 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<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>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<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</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS



**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019*District: Churachandpur***Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Churachandpur (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 30-32 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 82 % (min). The average wind speed may be 3-4 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<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>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<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</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019*District: Imphal East***Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Imphal East (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light rains from Wednesday. The sky will remain partly cloudy with max. temp. 29-31 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 97 % (max) & 69 % (min). The average wind speed may be 4-6 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<b>Field Crops</b>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Kharif Rice</b>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythothrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<b>Horticulture Crops</b>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Ginger</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1.Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakhoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019

District: Imphal West

**Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Imphal West (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light rains from Wednesday. The sky will remain partly cloudy with max. temp. 29-30 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 98 % (max) & 69 % (min). The average wind speed may be 4 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythothrin @ 15 ml/ 15 litre water.
Soybean/ Groundnut/ Rice Bean	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
Blackgram	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
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
Ginger	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
Cauliflower	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>





			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1.Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019*District: Senapati***Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Senapati (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-31 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 77 % (min). The average wind speed may be 4-5 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

<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>	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
<b>Soybean/ Groundnut/ Rice Bean</b>	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
<b>Millet</b>	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
<b>Blackgram</b>	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
<b>Potato</b>	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
<b>Seed storage</b>	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.
<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</b>	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
<b>Cauliflower</b>	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
<b>Fruit plants (Mango, Litchi, guava)</b>	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 16<sup>th</sup> August, 2019

District: Tamenglong

**Past weather for the of Imphal West (13<sup>th</sup> to 15<sup>th</sup> August, 2019):**

14.3 mm rainfall was observed during the past three days. The skies remained mainly cloudy to cloudy. Maximum temperature ranged from 27.6 – 29.7 °C and minimum of 21.4 – 22.6 °C. Mean relative humidity of 90.0 % max & 73.0 % min was recorded in the past three days & average wind speed was 2.0 – 6.1 km/ hr.

**Weather forecast for Tamenglong (17<sup>th</sup> to 21<sup>st</sup> August, 2019):**

Likely to have light to moderate rains upto Wednesday. The sky will remain partly cloudy to cloudy with max. temp. 29-30 °C & mini. temp. 24-25 °C. Relative humidity may reach upto 99 % (max) & 76 % (min). The average wind speed may be 4-5 km/hr.

**General Advisory:**

1. Regularly monitor water requirement of the crops in the field. Give life-saving irrigation wherever possible.
2. Mulching may be done to conserve available soil moisture.
3. Monitor insect-pest infestation in crops.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Tillering		<ul style="list-style-type: none"> <li>- If water is available, life-saving irrigation may be given.</li> <li>- In direct sown crop fields, thinning and weeding may be done.</li> <li>- One hand weeding may be done at 20-30 days after transplanting.</li> <li>- After weeding, drain out the water and apply 33kg of urea as top dress after 30days of transplanting. Drain in water after 48hrs of top-dressing.</li> </ul>
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 litre of water.
		Sucking insect	- Imidachloprid @ 8ml/ 15 litres of water.
		Leaf folder, borer	- Spray Lambdacythrin @ 15 ml/ 15 litre water.
Soybean/ Groundnut/ Rice Bean	Vegetative	Rust in Soybean	<ul style="list-style-type: none"> <li>- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. Use a slow –release organic fertilizer on crops and avoid excess nitrogen.</li> <li>- Apply copper sprays or sulfur powder or bio-fungicide to prevent infection of susceptible plants.</li> </ul>
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut or 3 sprayings of Bordeaux mixture (4:4:50) with linseed oil as sticker at an interval of 15 days are effective in checking the disease.
		Hairy caterpillars	- For control of red hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
Millet	Sowing		<ul style="list-style-type: none"> <li>- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing.</li> <li>- Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.</li> </ul>
Blackgram	Sowing		- Treat seeds of blackgram with talc formulation of <i>Trichoderma viride</i> @ 4g/kg of seed. In rainfed condition, dibble the seeds at a spacing of 25x10cm.
Potato	Land preparation		- Land preparation for planting potato for early crop and also for production of seed may be started after the rains in foothills and upland area. Select the area with fertile and sandy loam soil rather than with stone and gravel.
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
Ginger	Rhizome formation	Shoot borer	- Spray Dichlorovos @0.5ml/lit water and Sixer (Carbendazim + Mencozeb) @ 2g/lit water.
Cauliflower	Transplanting to vegetative		<ul style="list-style-type: none"> <li>- Transplanting of raised early variety seedlings. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation.</li> <li>- Transplant healthy seedlings at a spacing of 45cm x 45cm.</li> </ul>
Fruit plants (Mango, Litchi, guava)	Nursery/ planting		<p>Procure seedlings/ planting material of good strains of Mango, Litchi and Guava from reliable source.</p> <p>Foothills/ hill slope areas are desirable site for establishment of new orchards.</p> <p>Planting material/ nursery must be handled carefully to avoid any</p>



			damage to the plant and also avoid breakage of earth ball.
Onion	Sowing/ planting		- This is the season for sowing of onion in the upland areas.
Banana	For old orchard		- Remove unwanted suckers. After 30-35 days of harvesting fruits, mother plant must be cut at a height of 0.6m or 2 ft. Maintain only 3 plants per pit.
Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
			Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O <sub>2</sub> ) 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	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding

**SMS:**

Lakliba Yumjakeisada nong khara churaba yai. Phou loufamda napi foidokaga ishing chithokpiyu aduga pari amada 33kg gi changda Urea happiraga pung 48gi matungda ishing muk chansinbiyu. Nung hawai manada kolhing kaba manbi laina ngakthoknaba copper yaoba hidak/ sulfur powder natraga bio-fungicide kappiyu.

(I. Meghachandra Singh)  
Nodal Officer, GKMS