



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Imphal-East**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Imphal- East (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 30.0 – 32.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 99 % (max RH) & 90 % (min RH). The average wind speed may be 2 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



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**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Imphal-West**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Imphal- West (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 31.0 – 32.0 °C & minimum temp. 22.0 – 23.0 °C. Relative humidity may reach upto 98 % (max RH) & 92% (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



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**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Senapati**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Senapati (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 26.0 – 29.0 °C & minimum temp. 17.0 – 19.0 °C. Relative humidity may reach upto 96 % (max RH) & 88 % (min RH). The average wind speed may be 2km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.





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**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Tamenglong (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 26.0 – 31.0 °C & minimum temp. 18.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 87 % (min RH). The average wind speed may be 2 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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





**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Thoubal**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Thoubal (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach upto 97 % (max RH) & 74 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
	Integrated Fish Farming	Fish	Same as grow out fish management
Pig			About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
Duck			200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Ukhrul**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Ukhrul (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 26.0 – 28.0 °C & minimum temp. 17.0 – 19.0 °C. Relative humidity may reach upto 96 % (max RH) & 80 % (min RH). The average wind speed may be 2-3km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliose.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Bishnupur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Bishnupur (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 26.0 – 31.0 °C & minimum temp. 19.0 – 21.0 °C. Relative humidity may reach upto 98 % (max RH) & 88 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.





**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



**ICAR Research Complex for N.E.H. Region  
Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Chandel**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Chandel (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 25.0 – 29.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach upto 96 % (max RH) & 82 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
<b>Chilli</b>	Vegetative to fruiting		- After harvesting of matured ones spray Copper oxichloride (0.3%) or Mancozeb alternatively with Metalxyl and Mencozeb combination at 15 days interval.
<b>Cucurbits</b>	Fruiting		- Avoid the fruits to touch soil by staking or with the support of dried twigs. - In the mid-hills area remove soil beneath the fruit from time to time.
<b>Turmeric</b>	Vegetative		- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



**ICAR Research Complex for N.E.H. Region  
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**“Gramin Krishi Mausam Seva”**

Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Avoid caking of litter materials. - Use only wholesome water. Do not provide muddy/ pond/ river water as there are chances of attack of coli bacilliosea.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Ranikhet	1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R <sub>2</sub> B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). Afterwards at every two months interval.
Sheep/ Goat	Above 3 months of age	Fascioliosis	Give Tolzan-F @ 0.5ml/10kg body weight in association with vitamins.
Pig	All age groups	Preventive measures	Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
		Scabies/ mites	Application of Scaboma will prevent scabies.
		Deworming	Give Piperazine liquid @ 10-15ml orally once only.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Amphistomiasis	Give Tolzan @10-15mg/kg body weight.
		Skin infections	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-out	Pond and water	Maintain minimum depth of 1.0 - 1.5 m and pH at 7.0 – 7.5. Apply Lime/ Green AQ for maintaining good quality water. Make culture water fresh and clean with high oxygen content.
		Feed	Provide feed 2-3 times @ 5-10% body weight per day. Provide good feed having 30% crude protein fortified with vitamins and mineral.
		Fish	For semi-intensive farming, 8000-10000 fingerlings can be stocked in one hectare pond. - Stocking ratio may be maintained at 40% of surface feeder, 30% column feeder and 30% bottom feeder. - Sampling of fish for growth, disease should be done regularly by netting.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m. Maintain good quality water. Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 ml/kg</b> of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp/ ngakra.
Integrated Fish Farming	Fish	Same as grow out fish management	Same as grow out fish farming management.
	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.

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



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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**16<sup>th</sup> June, 2015**

**Churachandpur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 17<sup>th</sup> to 21<sup>st</sup> June, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (12<sup>th</sup> to 15<sup>th</sup> June, 2015)**

During last four days sky was partly cloudy to mainly cloudy but mainly clear during afternoon hours of 13<sup>th</sup> & 14<sup>th</sup> June. **53.6 mm** rainfall was recorded during last four days. Maximum temperature range observed was 28.0 – 30.0 °C, range of minimum temperature observed was 20.5 – 21.8 °C, mean relative humidity observed in morning and afternoon were 93.25 % and 70.25 % respectively. The average wind speed range was 2.2 – 3.6 km/hr.

**Weather forecast for next five days of Churachandpur (17<sup>th</sup> to 21<sup>st</sup> June, 2015)**

There may be moderate to heavy rains upto Sunday. Sky will remain cloudy with maximum temp. of 27.0 – 31.0 °C & minimum temp. 20.0 – 21.0 °C. Relative humidity may reach upto 99 % (max RH) & 83 % (min RH). The average wind speed may be 2 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Pre-kharif Rice</b>	Grain filling stage	- BLB - Sheath blight	- Maintain water level at 5-8 cm. - Spray Streptocycline @ 1gm/15-20 lit of water. - Spray Carbendazim 50WP @ 2 gm/lit of water or Dithane M-45 @ 2gm/lit of water.
<b>Kharif Rice</b>	Nursery to land preparation of main field		- Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling. - Uproot seedlings at 25 to 35 days after sowing depending on availability of water. About 1200 to 1300 bundles of seedlings (40cm diameter) may be required for transplanting one hectare area. - Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3 <sup>rd</sup> week of July (for late transplanting).
<b>Kharif maize</b>	Vegetative		- Weeding may be done for crops in vegetative stage. - Maintain proper drainage system to avoid water logging in and around the crop field due to rain during next five days.
<b>Soybean/ Groundnut</b>	Sowing to vegetative		- Maintain proper drainage system to avoid water logging. - Hand weeding should be done before 30-35 days after sowing. - If not sown early, sowing must be done before 1 <sup>st</sup> fortnight of July.
<b>Storage (seed)</b>			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
<b>Horticulture Crops</b>			
<b>Cowpea</b>	Sowing		- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
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<b>Cauliflower (Early)</b>	Land preparation to nursery sowing		- Apply 1-2 kg FYM/ m <sup>2</sup> . - Drench the soil with Captan 50 W.P. - After sowing cover the area with paddy straw till it germinates. Protect the nursery bed from rain.



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