



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Senapati (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 24.0 – 27.0 °C & minimum temp. 17.0 – 20.0 °C. Relative humidity may reach upto 98 % (max RH) & 77 % (min RH). The average wind speed may be 2-3 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS



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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Thoubal (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 25.0 – 28.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 100 % (max RH) & 92 % (min RH). The average wind speed may be 2-6 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



**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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Ukhrul (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 23.0 – 26.0 °C & minimum temp. 17.0 – 20.0 °C. Relative humidity may reach upto 99 % (max RH) & 83 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.





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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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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  
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**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

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**Weather forecast for next five days of Bishnupur (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 26.0 – 28.0 °C & minimum temp. 22.0 – 24.0 °C. Relative humidity may reach upto 100 % (max RH) & 82 % (min RH). The average wind speed may be 2-6 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
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			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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Manipur Centre, Lamphelpat, Imphal - 795 004**



**“Gramin Krishi Mausam Seva”**

Animal Sciences			
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Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
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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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS





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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Tamenglong (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 27.0 – 30.0 °C & minimum temp. 21.0 – 24.0 °C. Relative humidity may reach upto 100 % (max RH) & 71 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



**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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorhaegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Chandel (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 25.0 – 29.0 °C & minimum temp. 20.0 – 23.0 °C. Relative humidity may reach upto 99 % (max RH) & 91 % (min RH). The average wind speed may be 2-6 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



**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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Churachandpur (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 25.0 – 28.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 100 % (max RH) & 74 % (min RH). The average wind speed may be 0-5 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.





**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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Imphal - East (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 25.0 – 28.0 °C & minimum temp. 21.0 – 23.0 °C. Relative humidity may reach upto 100 % (max RH) & 87 % (min RH). The average wind speed may be 2-4 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



**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	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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. Drain out excess water accumulated in fish pond due to rain. 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.
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, IAAS



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



**“Gramin Krishi Mausam Seva”**

**MANIPUR BULLETIN**

**28<sup>th</sup> July, 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 29<sup>th</sup> July to 2<sup>nd</sup> August, 2015 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (24<sup>th</sup> to 27<sup>th</sup> July, 2015)**

During last four days sky was partly cloudy to mainly cloudy. **40.1 mm** rainfall was recorded during last four days. Maximum temperature range observed was 25.2 – 29.6 °C, range of minimum temperature observed was 21.6 – 22.4 °C, mean relative humidity observed in morning and afternoon were 91.3 % and 7.3 % respectively. The average wind speed range was 4.0– 6.0 km/hr.

**Weather forecast for next five days of Imphal - West (29<sup>th</sup> July to 2<sup>nd</sup> August, 2015)**

There may be light rain during next five days. Sky will remain partly cloudy to cloudy upto with maximum temp. of 26.0 – 29.0 °C & minimum temp. 20.0 – 23.0 °C. Relative humidity may reach upto 100 % (max RH) & 77 % (min RH). The average wind speed may be 0-4 km/ hr during next five days. The Wind direction may be North Easterly to Easterly during next five days.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Kharif Rice</b>	Vegetative		- After transplanting maintain water level of 5-8 cm. - Monitor insect pest infestation in crop.
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
<b>Soybean</b>	Flowering		- Maintain proper drainage system to avoid water logging. - Weeding may be done to keep the field weeds free to avoid hairy caterpillar.
<b>Groundnut</b>	Flowering		- Weeding may be done to keep the field weeds free to avoid hairy caterpillar. Also, avoid water logging.
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease.
<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>Turmeric</b>	Vegetative	Leaf Spot and leaf blotch	- Repeat spraying of DM-45 @ 2.0 g/ lit of water as prophylactic measure against Leaf spot and Leaf blotch at 7 days interval.
<b>Chilli</b>	Fruiting to harvesting	- Anthracnos / fruit rot	- For Anthracnos spray Mancozeb @ 2 g/ lit of water at 7 – 10 days interval twice or thrice depending upon the incidence.
<b>Bhindi</b>	Fruiting to Harvesting		- Spray Dichlorovos @ 0.5 ml/lit of water or any neem based pesticides against Jassid, throughout the leaves after the harvesting both mature and immature fruits. - Go for frequent harvest of fruits. Use cheap hand gloves/ long sleeve shirt to avoid allergy while harvesting for commercial growers.
<b>Tomato</b>	Nursery / transplanting		- Raise tomato in polyhouse.
<b>Cauliflower</b>	Nursery		- After variety like White shot, adopt White flash in raised nursery bed. - Provide temporary shed.
<b>Banana</b>	New Plantation Old Plantation		- Plant banana in newly constructed ring bands or bank of rivers/ ponds at a spacing of 2.7m x 3m for tall varieties and 1.8m x 2.4m or 1.8m x 2.4m for dwarf varieties. Pit size: 2x2x2 feet. Fill up the pit with soil & FYM in the ratio 3:2. Plant one sucker (with broad base & narrow leaves) per pit.
			- Desuckering and removal of dried leaves and trashes and maintaining 3 plants per pit is required. - Care must be taken to avoid wilting disease in banana grown in same pit in poor drained area for more than 5-6 years.



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Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Management	- Mix lime powder @ 2 kg per 100 sq. ft. area in litter material. - Ensure that the litter material is dry as the RH value is likely to be high so as to prevent many secondary problems that may arise due to wet litter inside the shed.
		Coccidiosis	- Give COximar@2g/ litre of drinking water. Give only medicated water for 5-7 days.
		Deworming	Give Tetramizole @ 10g in 10 litres of drinking water for 100 birds.
Sheep/ Goat	Above 3 months of age	Deworming	Give Fasinex/ Endex/ Ranizole @ 3ml/kg body weight.
		Vaccination	- Vaccinate against Haemorraegic Septicaemia (H.S.).
Pig	All age groups	Deworming	Give Probenzimidazole (Thiophanate) @ 8mg/kg body weight.
		Coccidial infection	- Sulpha drug @ 1g/5kg body weight for 7 days.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Vaccination	- Vaccinate against H.S.
		Deworming	- Deworm against parasites Haemonchus sp., Trichostrongplus sp. with Niclosamide(Cestonex- N) @ 75mg/ kg body weight once only or Tolzan-F @ 15mg/kg body weight.
		Maggot infestation/ Follicular mange	Apply locally as directed.
		Management	Avoid from drinking of field muddy water.
Fishery:			
• Encircle fish ponds with happa net to avoid escape of fishes during rainy days.			
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