



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Chandel (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 29.0 – 32.0 °C & minimum temp. 17.0 – 21.0 °C. Relative humidity may reach upto 84 % (max RH) & 49 % (min RH). The average wind speed may be 4-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya	Transplanting		<ul style="list-style-type: none"> - In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where high wind speed is experienced. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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



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“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Churachandpur (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 19.0 – 20.0 °C. Relative humidity may reach upto 95 % (max RH) & 57 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangan and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya	Transplanting		<ul style="list-style-type: none"> - In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where high wind speed is experienced. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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12th May, 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 13th to 17th May, 2015 as below:

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Weather forecast for next five days of Imphal- East (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 18.0 – 21.0 °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.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

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Pond water must be given after proper treatment.*

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Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
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		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
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		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
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Imphal-West

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Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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



“Gramin Krishi Mausam Seva”

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

(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

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Senapati (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 25.0 – 29.0 °C & minimum temp. 14.0 – 18.0 °C. Relative humidity may reach upto 94 % (max RH) & 69 % (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
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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“Gramin Krishi Mausam Seva”

Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.



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“Gramin Krishi Mausam Seva”

Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.
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(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

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Tamenglong (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 32.0 °C & minimum temp. 17.0 – 22.0 °C. Relative humidity may reach upto 97 % (max RH) & 65 % (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
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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“Gramin Krishi Mausam Seva”

Papaya	Transplanting		<ul style="list-style-type: none"> - In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where high wind speed is experienced. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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



“Gramin Krishi Mausam Seva”

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

(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

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Thoubal (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 29.0 – 31.0 °C & minimum temp. 17.0 – 20.0 °C. Relative humidity may reach upto 94 % (max RH) & 67 % (min RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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



“Gramin Krishi Mausam Seva”

Papaya	Transplanting		<ul style="list-style-type: none"> - In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where high wind speed is experienced. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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



“Gramin Krishi Mausam Seva”

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

(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

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Ukhrul (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 – 29.0 °C & minimum temp. 14.0 – 18.0 °C. Relative humidity may reach upto 84 % (max RH) & 48 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.*

Pond water must be given after proper treatment.

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.



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Paddy cum fish culture	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.
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(I. Meghachandra Singh)
Scientist i/c, GKMS



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“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th May, 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 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th May, 2015)

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8 – 30.6 °C, range of minimum temperature observed was 14.5 – 19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1 – 3.5 km/hr.

Weather forecast for next five days of Bishnupur (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 – 31.0 °C & minimum temp. 17.0 – 21.0 °C. Relative humidity may reach upto 95 % (max RH) & 64 % (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
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs. - Prepare nursery bed of 700 m ² area, apply well decomposed FYM/ compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. - Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativio@2g/kg seed.
Rabi Maize	Cob maturity		- Drain out excess rain water if accumulated due to rain in crop field. - Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativio@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		- Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- 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.
Horticulture Crops			
Lime/ Lemon	Transplanting		- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya	Transplanting		<ul style="list-style-type: none"> - In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where high wind speed is experienced. - Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric	Sowing of turmeric		<ul style="list-style-type: none"> - Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery preparation		Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative to flowering and fruiting		<ul style="list-style-type: none"> - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.

Animal Sciences

** Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water.
Pond water must be given after proper treatment.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups		<ul style="list-style-type: none"> - Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat	Above 3 months of age (as and when required)	Black Quarter/ Haemorrhagic Septicaemia and F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig	All age groups	Preventive measures	Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Skin infections	<ul style="list-style-type: none"> - 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.
		Black Quarter/ Haemorrhagic Septicaemia	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
		F.M.D.	- Vaccinate against F.M.D.

Fishery:

Carp culture	breeding	Pond and water	<ul style="list-style-type: none"> - Bund breeding can be started. - Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries	Pond and water	<ul style="list-style-type: none"> - Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. - Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stocked in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.

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