



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 21.0 - 27.0 °C and minimum temp. of 18.0 – 19.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 92 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 26.0 - 31.0 °C and minimum temp. of 19.0 – 22.0 °C. The maximum RH is likely to attain a max value of 97 % and minimum RH of 79 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 23.0 - 28.0 °C and minimum temp. of 19.0 – 20.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 95 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

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Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
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	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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10th May, 2013

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 11th to 15th May, 2013 as given below:

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Main Weather Observation

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Weather warning during next 3 days

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Field Crops			
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Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 19.0 - 25.0 °C and minimum temp. of 17.0 – 18.0 °C. The maximum RH is likely to attain a max value of 100 % and minimum RH above 90 % upto next five days but it is likely to decrease thereafter. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting.



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			- Provide proper drainage to avoid water logging in crop field.
Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 20.0 - 25.0 °C and minimum temp. of 15.0 – 18.0 °C. The maximum RH is likely to attain a max value of 98 % and minimum RH of 93 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 23.0 - 29.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain a max value of 99 % and minimum RH of 97 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Manipur Centre, Lamphelpat, Imphal - 795 004



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 22.0 - 28.0 °C and minimum temp. of 18.0 – 20.0 °C. The maximum RH is likely to attain a max value of 100 % and minimum RH of 93 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Groundnut & soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Manipur Centre, Lamphelpat, Imphal - 795 004



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ tomato/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

Fisheries

** In case of moderate rainfall, water should not be allowed to drain directly into the ponds as it may contaminate with unwanted elements.*

** If heavy rain has occurred then apply lime @ 25kg/ha in a month. Also, encircle the pond with nylon net to prevent the escape of fishes if pond water overflows due to heavy rains.*

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Brooders	Pond and water	Ensure good quality/ clean water free from unwanted plants and animals with a minimum depth of 1.5 m. Fish feed pellet or rice bran & oil cakes (in ratio 1:1) should be provided @ 3-5% body weight per day in 2-3 splits. Spray CIFAX on the surface of the pond water. Male and female brooders must be kept in separate tanks.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from silt, weeds, insects and other unwanted fishes. ▪ p^H of water must be maintained at 7.0-8.0 ▪ Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	<ul style="list-style-type: none"> ▪ Water should be clear and clean with pH 7.0-7.5 and dissolved oxygen level should be 6-8 ppm. ▪ Hatching can be done in traditional hapas having outer & inner hapas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given @ 5-10% body weight/day.



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

10th May, 2013

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 11th to 15th May, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (7th to 9th May, 2013)</u></p> <p>During the past three days the sky was cloudy. 61.5 mm rainfall was recorded during past three days. Maximum temperature range observed was 20.5 – 24.2 °C, range of minimum temperature observed was 15.9 – 18.6 °C, mean relative humidity observed in morning and afternoon were 96.7 % and 92.7 % respectively. The average wind speed range was 1.0 – 2.1 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (11th to 15th May, 2013)</u></p> <p>It is likely to have moderate to heavy rains during next two days then light rains thereafter. The sky is likely to be cloudy with maximum temp. of 18.0 - 25.0 °C and minimum temp. of 14.0 – 17.0 °C. The maximum RH is likely to attain a max value of 97 % and minimum RH of 77 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Main Weather Observation

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 13th May, 2013)

Rain/thundershowers would occur at many places over northeastern states

Weather warning during next 3 days

Heavy rainfall and thundersquall would occur at one or two places over Manipur during next 48 hrs

Weather Outlook for subsequent 4 days from 13th to 17th May, 2013

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Rice	(Pre-kharif) Tillering		- Drain out excess water from the crop field. Maintain water depth of 5-8 cm. - Top dressing may be done after this wet spell as we need to completely drain out water before top dressing and nearly 48 hrs is required for fertilizers to get absorbed in the soil.
	Kharif		Field may be ploughed. Seed beds may be prepared in terraces.
Maize	Early vegetative		- Top dressing may be done when the plants is knee high.
	Vegetative to cob formation		- Maintain proper drainage system.
Soybean	Land preparation to sowing and early vegetative		- Sowing may be continued after this wet spell. Proper drainage must be made to avoid water logging in and around the crop field.
Blackgram & Rice bean	Land preparation		- After this wet spell, land preparation may be done for sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
<i>* As there is forecast of moderate to heavy rains in next two days field operations may be taken up after 2-3 days after this wet spell.</i>			
Ginger & turmeric	Planting to early vegetative		- If the planting is not yet done, spread the rhizome in rain sheltered area, cover it with dry sand of 2 or 1½ inches thick for incubation till the field is ready for planting. - Provide proper drainage to avoid water logging in crop field.



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Cucurbits	Flowering to fruiting		- Proper drainage and staking for trilling may be made. Avoid fruits to touch ground.
Chilli/ brinjal	- For standing crop in field (vegetative to fruiting) - Transplanting		- Proper drainage should be made to prevent water logging as water logging for more than 48 hrs is highly detrimental to plant growth. - As the field conditions do not permit for transplanting of seedlings. If the seedlings are in the stage ready for transplanting then it may be planted in secondary nursery or polybags. They may be shifted when the field is ready. This practice will avoid adverse effect on plant due to late transplanting.

Animal Sciences

** Provide proper drainage around the birds and animal sheds to avoid water logging as mosquitoes breeding may take place in it. Also, take care that there is no water leakage in the sheds. Clean drinking water must be provided and de-worming must be done.*

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	- Swine Fever - FMD - Diarrhoea	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Diarocare bolus (@1.5g); 1-2 bolus twice daily for 4 days.
Cattle / Buffalo/ Mithun	All age groups except three months or below	- B.Q. and Haemorrhagic Septicaemia - FMD	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination. - Check that the animals do not drink the water that has been drained from hills/ upland areas, as the spores causing B.Q. are abundantly present in it. - Vaccinate all the susceptible animals against the FMD.
Poultry	All susceptible age groups	Ranikhet Disease	- Birds should be vaccinated against Ranikhet disease but deworm before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days.
		Management	- To prevent coccidiosis, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material. Provide clean & safe drinking water by adding Sokrena (scitizer) to avoid Colebacilliosis . Wire net portion of the wall should be covered by hanging polythene sheet to protect from rain.

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