



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016) The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.	Weather forecast for next five days of Bishnupur (13th to 17th April, 2016) There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 31.0 – 33.0 °C & minimum temp. 17.0 – 18.0 °C. Relative humidity may reach upto 87 % (max RH) & 23 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be East to South west Westerly during the next five days.
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Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		-Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			-In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		-Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		-Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		- Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN 12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016) The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.	Weather forecast for next five days of Chandel (13th to 17th April, 2016) There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 30.0 – 33.0 °C & minimum temp. 16.0 – 18.0 °C. Relative humidity may reach upto 79 % (max RH) & 17 % (min RH). The average wind speed may be 3-5 km/hr. Wind direction may be South south Easterly to North Westerly during the next five days.
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Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.

Weather forecast for next five days of Churachandpur (13th to 17th April, 2016)

There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 32.0 – 34.0 °C & minimum temp. 20.0 – 22.0 °C. Relative humidity may reach upto 91 % (max RH) & 24 % (min RH). The average wind speed may be 4-5 km/hr. Wind direction may be South Easterly to North South south Westerly during the next five days.

Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sactum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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Imphal East

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The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.

Weather forecast for next five days of Imphal East (13th to 17th April, 2016)

There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 29.0 – 34.0 °C & minimum temp. 15.0 – 18.0 °C. Relative humidity may reach upto 94% (max RH) & 20 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be North East to North west Westerly during the next five days.

Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th April, 2016

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 13th to 17th April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016) The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.	Weather forecast for next five days of Imphal West (13th to 17th April, 2016) There may be rain during the next five days. Sky will remain variable sky to mainly cloudy, with maximum temp. of 27.0 – 31.0 °C & minimum temp. 14.0 – 17.0 °C. Relative humidity may reach upto 96% (max RH) & 31 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be South Westerly to South west Westerly during the next five days.
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Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		-Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			-In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		-Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		-Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		- Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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



“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016)

The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.

Weather forecast for next five days of Senapati (13th to 17th April, 2016)

There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 29.0 – 32.0 °C & minimum temp. 14.0 – 19.0 °C. Relative humidity may reach upto 95 % (max RH) & 20 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be North Easterly to Westerly during the next five days.

Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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



“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the vaccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016)

The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.

Weather forecast for next five days of Tamenglong (13th to 17th April, 2016)

There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 31.0 – 32.0 °C & minimum temp. 15.0 – 18.0 °C. Relative humidity may reach upto 92 % (max RH) & 29 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be North Easterly to South Westerly during the next five days.

Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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



“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN 12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016) The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.	Weather forecast for next five days of Thoubal (13th to 17th April, 2016) There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 32.0 – 34.0 °C & minimum temp. 16.0 – 19.0 °C. Relative humidity may reach upto 85 % (max RH) & 19 % (min RH). The average wind speed may be 4-6 km/hr. Wind direction may be South east Easterly to Westerly during the next five days.
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Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		<ul style="list-style-type: none"> - Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	<ul style="list-style-type: none"> - To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		<ul style="list-style-type: none"> - Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		<ul style="list-style-type: none"> -Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			<ul style="list-style-type: none"> -In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			<ul style="list-style-type: none"> -Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		<ul style="list-style-type: none"> -Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		<ul style="list-style-type: none"> -Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		<ul style="list-style-type: none"> - Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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



“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Johnes disease & Sterility	Immediate proper treatment for the disease should be provided.
		Fodder crops	-Maize should be sown for use as green fodder. -Napier/Guinea grass may be transplanted. -Silage can be prepared.
		Puerperal Fever in Pregnant animals	-50-60 gram of mineral mixture every day.
		Decrease in milk production	-The milk & urine samples must be sent for testing.
	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.



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



“Gramin Krishi Mausam Seva”

MANIPUR BULLETIN

12th April, 2016

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 April, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (8th to 11th April, 2016) The sky was fair to mainly cloudy. No Rainfall was recorded during past four days. Maximum temperature range observed was 29.0– 31.0 °C, range of minimum temperature observed was 15.1 – 20.0 °C, mean relative humidity observed in morning and afternoon were 78.5 % and 50.25 % respectively. The average wind speed range was 6.2 to 10.6 km/hr.	Weather forecast for next five days of Ukhrul (13th to 17th April, 2016) There may be rain during the next five days. Sky will remain clear to mainly cloudy, with maximum temp. of 31.0 – 34.0 °C & minimum temp. 16.0 – 20.0 °C. Relative humidity may reach upto 74 % (max RH) & 18 % (min RH). The average wind speed may be 3-4 km/hr. Wind direction may be Easterly to North Westerly during the next five days.
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Weather Outlook for subsequent 2 days from 17th to 19th April, 2016

Rain/thunderstorm at a few places very likely over northeastern states

Weather Warning during next 5 days

Thunderstorm accompanied with squall/hail likely at isolated places over Manipur on 12th April, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Main field preparation to transplanting		- Row planting of 2-3 seedlings per hill at 25x10 cm using beaded rope may be done. - Transplanting may be done upto mid of April. - To enhance the establishment of transplanted seedlings, water depth of 2-3cm should be maintained in the field after transplanting then it may be increased gradually.
Rabi Maize	Vegetative		- Urea may be applied @ 66kg/ ha during inter-culture operation. - Thinning may be done. Maintain single plant per hill.
		Stem borer	- To control the infestation of stem borer, apply few granules of Carbofuran 3G at maize whorl.
Soybean/ Groundnut/ Blackgram	Land preparation		- Land preparation for sowing of soybean/ groundnut/ blackgram may be started. - Apply 10 – 13 t/ha or 2.5 – 3 t/sangam of FYM or compost by mixing thoroughly in the soil 1 - 2 weeks before sowing.
Horticulture Crops			
Tomato	Fruit borer		-Prophylactic measure to protect from Early blight of Tomato is recommended. D. M-45 (Mencozeb) @ 2gm/l may be sprayed.
Water melon			-In early stage the beds and ridges should be free from weeds. In the later stage the vine will automatically cover the space in between the plants. Hence, weeding cum top dressing is recommended
Allium odorosum			-Plantation of <i>Allium odorosum</i> (Maroi nakuppi). -High density planting (1-0-12 nos. of rhizome) per hill is recommended for high yield at a spacing of 6" X 6". -Coriander seed may also be sown in between the Allium Species as an intercrop.
Fruit plants (Banana, Lime, Lemon, Orange, Kiwi, etc.)	Procurement of planting material		-Jungle cutting and preparation of pit for planting/transplanting of these fruit plants should be started. Pit preparation should be done atleast 1 month ahead of planting. -Procure quality planting material
Ginger/Turmeric	Land preparation		-Land preparation for plantation of Ginger/turmeric may be started. -Upland areas are more suitable for the crop. -Ginger rhizome seeds affected by rhizome rot should be discarded.
Potato	For seed		- Harvest the crop when the skin of the tuber has become firm. - Harvest should be done on sunny day only. Heap the produce in the shade for curing of skin and left undisturbed for 15-20 days.
Animal Sciences			
Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories



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“Gramin Krishi Mausam Seva”

animal			
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	- To protect birds of all age groups from inclement weather, there should be adequate arrangements for artificial lighting and heating. - Needed to increase energy giving ingredients of feed (i.e. Maize, Wheat, Bajra etc.) and can be added 5% more.
		Ranikhet Diseases	Birds must be vaccinated as per recommended schedule mentioned below as the probability of occurrence of the disease is high during March- April months. 1. F-1 Strain may be first administered within 7 days of age and second dose may be given at 30days for all birds. 2. R ₂ B vaccine of 8-9 weeks of age group birds (layers). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers). After that at every two months interval.
Sheep/ Goat	All age groups excepts the young ones	PPR (Peste Des Petits Ruminants)	- If the animals have not yet been vaccinated, give vaccine now for PPR (Peste Des Petits Ruminants).
		Enterotoxaemia	- If the Lambs and Kids in particular should be given the caccination to prevent Enterotoxaemia.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
Pig	All age groups excepts the young ones	Care & management for newly born one	-Artificial lighting and heating to the piglets. -Provide adequate bedding materials.
		Deworming	-Give Morantel citrate tablet @ 15 mg/kg of body weight.
		Ectoparasitism	- Keep the sheds clean. Hang Bouquets of Basil (Ocimum sanctum) or Lemon Grass (Cymbopogon citrates) in the animals sheds to keep away the ecto-parasites. Neem oil based disinfectants can be sprayed. Butox solution (2 C.C. in 1 litre of water) can also be used.
		Hog Cholera	-Vaccination against swine fever must be carried out.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	-If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
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	Breedable age group	Controlled breeding	-control breeding programme for animals should continue in the month of February so the all participating animals become pregnant during this month.
	Milch cow	Mastitis	-To prevent mastitis they should be milked completely.
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fries/ fingerlings/ brooders	Pond and water	-Maintain minimum depth of 1.5 – 2.0 m by filling fresh and clean water. -Apply Agri-Lime in brooder pond at small quantity at an interval of 30 days regularly.
		Feed	Provide feed 1-2 times @ 2 % body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs for Common Carp. - Harvesting of fish may be done in area where water availability is low.