



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016)

The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.

Weather forecast for next five days of Bishnupur

(2nd to 6th July, 2016) Likely to have light to moderate rain upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 29 to 30 °C & minimum temp. 24.0 to 25.0 °C. Relative humidity may reach upto 99 % (max RH) & 80 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be Easterly to South Westerly during the next five days.

Weather outlook for subsequence 2 days from 6th to 8th July, 2016

Rainfall at many places likely over northeastern states

Weather warning for next five days *

Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyriphos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



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Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/litr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium permanganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		■ Coccidiosis ■ Deworming	■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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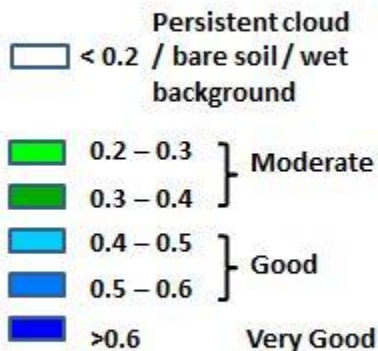


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture. ➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches ➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



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**MANIPUR BULLETIN****1st July, 2016****Chandel**

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Weather forecast for next five days of Chandel (2nd to 6th July, 2016)

Likely to have moderate rain upto Wednesday. Sky will remain overcast, with maximum temp. 29°C & minimum temp. 23.0 to 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 81 % (min RH). The average wind speed may be 3-6 km/hr. Wind direction may be Easterly to South South-Westerly during the next five days.

Weather outlook for subsequence 2 days from 6th to 8th July, 2016

Rainfall at many places likely over northeastern states

Weather warning for next five days *

Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyrifos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
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Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
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Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

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Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
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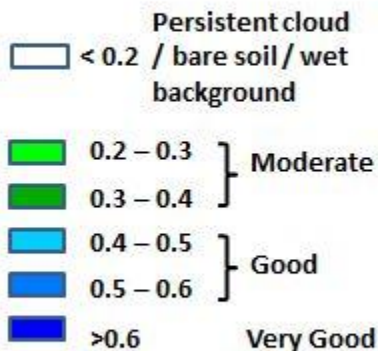


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Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
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		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
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	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture. ➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches ➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

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Weather outlook for subsequence 2 days from 6th to 8th July, 2016**Rainfall at many places likely over northeastern states****Weather warning for next five days *****Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016**

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		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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“Gramin Krishi Mausam Seva”

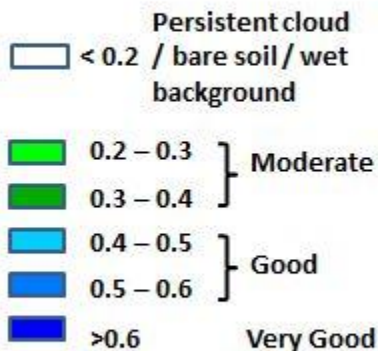


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 2016****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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016) The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.	Weather forecast for next five days of Imphal East (2nd to 6th July, 2016) Likely to have light to moderate rains upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 27 to 29 °C & minimum temp. 23.0 °C. Relative humidity may reach upto 100 % (max RH) & 68 % (min RH). The average wind speed may be 0-3 km/hr. Wind direction may be Easterly to South West Westerly during the next five days.
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Weather outlook for subsequence 2 days from 6th to 8th July, 2016**Rainfall at many places likely over northeastern states****Weather warning for next five days *****Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyrifos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



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“Gramin Krishi Mausam Seva”



Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/ltr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium permanganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		■ Coccidiosis ■ Deworming	■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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“Gramin Krishi Mausam Seva”

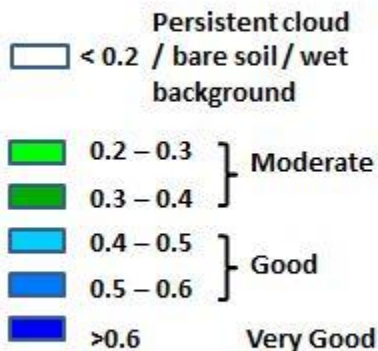


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016)

The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.

Weather forecast for next five days of Imphal West

(2nd to 6th July, 2016) Likely to have light to moderate rain upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 29 to 30 °C & minimum temp. 23.0 to 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 71 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be North East Easterly to South West Westerly during the next five days.

Weather outlook for subsequence 2 days from 6th to 8th July, 2016

Rainfall at many places likely over northeastern states

Weather warning for next five days *

Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyriphos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/ltr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium permanganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		■ Coccidiosis ■ Deworming	■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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“Gramin Krishi Mausam Seva”

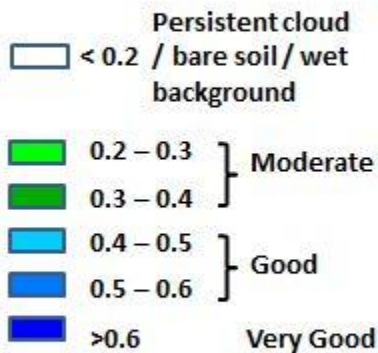


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016) The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.	Weather forecast for next five days of Senapati (2nd to 6th July, 2016) Likely to have light to moderate rains upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 30 to 31 °C & minimum temp. 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 65 % (min RH). The average wind speed may be 2 km/hr. Wind direction may be North East Easterly to South Westerly during the next five days.
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Weather outlook for subsequence 2 days from 6th to 8th July, 2016**Rainfall at many places likely over northeastern states****Weather warning for next five days *****Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyrifos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/ltr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium permanganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		■ Coccidiosis ■ Deworming	■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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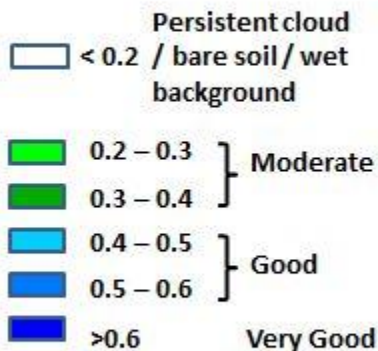


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture. ➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches ➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016)

The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.

Weather forecast for next five days of Tamenglong (2nd to 6th July, 2016)

Likely to have light to moderate rains upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 28 to 29 °C & minimum temp. 23 to 24.0 °C. Relative humidity may reach upto 99 % (max RH) & 76 % (min RH). The average wind speed may be 2 to 3 km/hr. Wind direction may be North East Easterly to South Westerly during the next five days.

Weather outlook for subsequence 2 days from 6th to 8th July, 2016

Rainfall at many places likely over northeastern states

Weather warning for next five days *

Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyrifos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	<ul style="list-style-type: none"> ■ Fruit rot ■ Fruit fly ■ Brown Spot 	➤ Spray Metalxyl+Mancozeb @ 2 g/ltr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium per manganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		<ul style="list-style-type: none"> ■ Coccidiosis ■ Deworming 	<ul style="list-style-type: none"> ■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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“Gramin Krishi Mausam Seva”

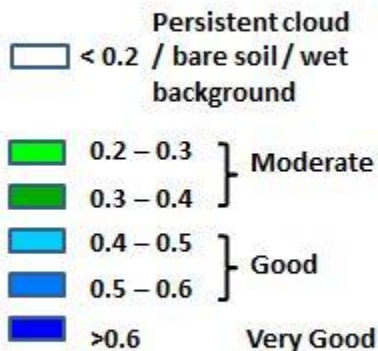


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016) The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.	Weather forecast for next five days of Thoubal (2nd to 6th July, 2016) Likely to have light to moderate rains upto Wednesday. Sky will remain mainly cloudy to overcast, with maximum temp. 29 to 30° C & minimum temp. 23 ° C. Relative humidity may reach upto 100 % (max RH) & 80 % (min RH). The average wind speed may be 2 to 4 km/hr. Wind direction may be Easterly to South Westerly during the next five days.
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Weather outlook for subsequence 2 days from 6th to 8th July, 2016**Rainfall at many places likely over northeastern states****Weather warning for next five days *****Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyriphos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



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“Gramin Krishi Mausam Seva”



Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/litr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium per manganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
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Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
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Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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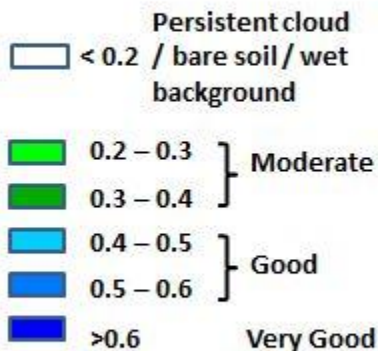


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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 Scientist i/c, IAAS



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****1st July, 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 2nd to 6th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (28th to 30th June, 2016)

The sky remained fair to overcast. Rainfall of 55.9 mm was recorded during past three days. Maximum temperature range observed was 29.8 to 34.6 °C, range of minimum temperature observed was 21.6 to 23.4 °C, mean relative humidity observed in morning and afternoon were 92.67 % and 82.33 % respectively. The average wind speed range was 2.5 to 4.9 km/hr.

Weather forecast for next five days of Ukhrul

(2nd to 6th July, 2016) Likely to have moderate rains upto Wednesday. Sky will remain overcast, with maximum temp. 29 to 30°C & minimum temp. 23 °C. Relative humidity may reach upto 99 % (max RH) & 75 % (min RH). The average wind speed may be 2 to 5 km/hr. Wind direction may be Easterly to Southerly during the next five days.

Weather outlook for subsequence 2 days from 6th to 8th July, 2016

Rainfall at many places likely over northeastern states

Weather warning for next five days *

Heavy to very heavy rain very likely at isolated places over Manipur on 2nd to 4th July, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Pre kharif rice	Maturity to Harvesting		<ul style="list-style-type: none"> ➤ Drain the water in the field about 10-15 days before expected date of harvesting ➤ Rice can be harvested when 80% of panicles turn hard & golden yellow. ➤ Over maturity should be avoided to reduce shattering losses. ➤ If the crops are ready to harvest, then harvest it before rain (as it is likely to have moderate rain from 4th July)
Main kharif rice	Nursery for transplanting		<ul style="list-style-type: none"> ➤ Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. ➤ Uproot the seedling of about 18-25 days old for line Planting ➤ Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. ➤ Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling to vegetative		<ul style="list-style-type: none"> ➤ Thin out plants at spacing of 30 cm x 15 cm and weed out. ➤ Maintain proper drainage system to avoid water logging. ➤ If not sown early, sowing may be done before 1st fortnight of July.
Ginger/ Turmeric	Vegetative		<ul style="list-style-type: none"> ➤ Weeding and inter-culture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. ➤ Avoid water logging in and around the crop field.
Soybean	Sowing		<ul style="list-style-type: none"> ➤ Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. ➤ If not sown early, sowing must be done before 1st fortnight of July ➤ Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Tree bean	Transplanting/ Fertilizer application		<ul style="list-style-type: none"> ➤ One year or more than a year old quality seedling may be transplanted in the pit. ➤ Recommended spacing is 10x10 m from plant to plant and row to row ➤ At the time of planting apply 5 kg FYM + 30 gm lime+30 gm linden 5% dust + 5 ml Chlorpyrifos 20 EC + 1.5 g Mancozeb + Carbendazim per pit. ➤ For 7 yrs and above and for bearing plants apply 7 kg FYM, 120 Kg urea, 300 gm SSP, 80 gm MOP, 1 Kg lime should be applied.
Turmeric/ Coriander	Intercropping		<ul style="list-style-type: none"> ➤ Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. ➤ High density sowing at a spacing of 5 cm x 10 cm may also be done.



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Colocassia	Leaf spot/ Leaf blight		➤ Apply Mancozeb @ 2 gm/ltr water at 7 days or Ridomil MZ -72 w.p. @ 2gm/ltr water 14 days interval at least twice.
Cucurbits (Water-melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		➤ Four leaf stage, young plants may be transplanted after rain ➤ Avoid water stagnation in the root zone, harvest the mature ones. ➤ Avoid the fruits to touch the ground by staking or with the support of dried twigs
Chilli	Seed Collection/Harvest		➤ Seed collection should be done preferably on bright sunshine hours. ➤ After harvesting of matured ones spray Copper oxichloride(0.3% or Mancozeb alternatively with Metalxyl and Mancozeb combination at 15 days interval
Cow pea	Harvesting		➤ As keeping quality is poor green ones should be harvested at the tender stage.
Passion Fruit	Flowering to fruiting	■ Fruit rot ■ Fruit fly ■ Brown Spot	➤ Spray Metalxyl+Mancozeb @ 2 g/litr water at 7 days interval ➤ Apply poison baiting with Jaggery+ fruit juice+Malathion (20:20:1) @ 40-50 baits/ha. ➤ Remove the infected leaves and burn. Spray Zineb@ 2 mg/ltr water.
Water mimosa (Neptunia Oleracea)	Planting and First harvest		➤ Maintain water at a depth of 2.5-3 ft. ➤ Use new slips having atleast 4-5 nodes for planting ➤ Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. ➤ Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. ➤ Seed rate: 840 steps/sangam

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management	➤ Provide only clean/wholesome drinking water only ➤ Do not give muddy water as there is chance of colibacillosis during the rainy season ➤ Use water sanitizer in drinking water/potassium per manganate (few grains) ➤ Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly
		■ Coccidiosis ■ Deworming	■ Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. ■ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose.
Sheep/ Goat	All age groups excepts the young ones	Care & management	➤ Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem ➤ Give multivitamins @15ml orally ➤ Use quality disinfectants for disinfecting the surrounding of the sheds
		Deworming	➤ Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management	➤ Mineral mixture be added in feed @ 10-20g/adult animal
		Mites infestation Enteric disease Diarrhoea & Dysentery	➤ Spray with Skin Heal Spray in sufficient quantity. ➤ Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. ➤ Prompt treatment with Antibiotics Sulpha drugs.
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, Enterotoxaemia etc.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	➤ Mix enough quantity salts in feed and water ➤ If the animals do not have access to green fodders, vitamin A injection/ supplements should be given. ➤ Food supplements may be given @20-30 gm/animals. ➤ Care should be taken to protect yoke gall/bursitis. ➤ Do not let animals graze in irrigated fodder fields/meadows ➤ After the birth of the self the new born must be fed with Colostrum within the

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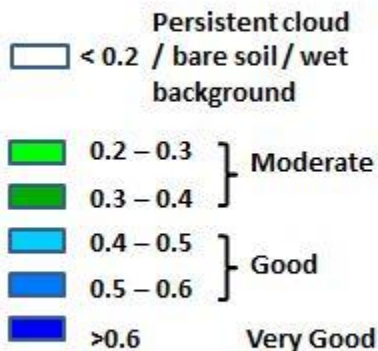


			first two hours. ➤ Give Calmore Forte @100ml orally once daily
Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	➤ Water depth should be maintain at 1.0-1.5m ➤ Agri-lime should be applied in ponds ➤ Ponds should be free from aquatic weed, predatory insects and fish. ➤ Encircle the pond with net or bamboo met as a preventive measure of flood.
		Feed	➤ Fish feed should be provided @ 10-15 % body weight per day.
		Fish	➤ About 5 million feeding fries are stocked per 1 ha for pre-nursing pond ➤ Duration is 25-45 days.
	Grow out	Pond and water	➤ Water depth should be maintain at 1.5-2.0m ➤ Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	➤ Sampling of fish for growth, disease (if any) should be done by regular netting. ➤ Partial harvesting of marketable size fishes are also recommended
		Fish	➤ Feed should be provided @ 3-5 % body weight per day ➤ Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	➤ Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			➤ 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
			➤ 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.

NDVI Map of Manipur for week ending 29.06.2016

North East Region

29 June 2016



Agriculture vigour is good over north-east states of country.

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