



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Bishnupur (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 28 - 30 °C & minimum temp. 20 - 21 °C. Relative humidity may reach up to 96 % (max RH) & 46 % (min RH). The average wind speed may be 4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.		

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field	Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Chandel (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 31 - 33 °C & minimum temp. 22 - 24 °C. Relative humidity may reach up to 85 % (max RH) & 40 % (min RH). The average wind speed may be 3-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.		

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field	Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN**19th May, 2017**Churachandpur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 20th to 24th May, 2017 as below:

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Weather forecast for next five days of Churachandpur (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 30 - 32 °C & minimum temp. 21 - 23 °C. Relative humidity may reach up to 96 % (max RH) & 58 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



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“Gramin Krishi Mausam Seva”



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
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		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.		

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field	Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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



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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

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Weather forecast for next five days of Senapati (20th to 24th May, 2017)

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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
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Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



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



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field		As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Tamenglong (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 31 - 34 °C & minimum temp. 21 - 23 °C. Relative humidity may reach up to 98 % (max RH) & 52 % (min RH). The average wind speed may be 2-4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



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



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field		As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Thoubal (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 30 - 33 °C & minimum temp. 22 - 24 °C. Relative humidity may reach up to 96 % (max RH) & 44 % (min RH). The average wind speed may be 4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.		

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field	Feed	As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Ukhrul (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 29 - 31 °C & minimum temp. 20 - 21 °C. Relative humidity may reach up to 82 % (max RH) & 40 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Care and management	Provide clean water (drinking). Add antibiotics in feed and water. Vaccinate against FMD.
		Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.		

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field	Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.	

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



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

**MANIPUR BULLETIN**19th May, 2017**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 20th to 24th May, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (16th to 18th May, 2017)

Observed mainly cloudy to cloudy sky but partly cloudy during afternoon hours of 18th May and **14.8 mm** rainfall was recorded during past three days. Maximum temperature range of 24.6 to 28.1 °C and minimum temperature range of 18.5 to 20.6 °C with mean relative humidity 97 % max and 79 % min was recorded in the past three days.

Weather forecast for next five days of Imphal East (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 28 - 30 °C & minimum temp. 20 - 21 °C. Relative humidity may reach up to 99 % (max RH) & 45 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle initiation (Pre-kharif rice)		- Maintain water level at 5-8 cm. - If the crop is at panicle initiation stage, apply 33 kg Urea/ha after complete removal of water. Irrigate field after 48 hrs of top dressing.
		Leaf folder and case worm etc	Apply Lambdacythothrin 5% @ 15 ml/ 15 litres of water, if case worm infested drain out the field immediately.
	Land preparation to nursery (Main kharif rice)		- Prepare main plots for ploughing. - Raise community nursery in upland area/ terrace so that it may be least affected with the rains. Prepare 700m ² of land is for a hectare. Seed rate is 40 – 60 Kg /ha for transplanting of rice. - Soak seeds and incubate before sowing.
Soybean	Sowing		Sowing may be done at spacing of 45 cm x 30 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing. Seed rate of soybean is 40-45 kg/ha or 10-11 kg of seed /sangam
Groundnut	Sowing		Seed rate is 100-110 kg of Kernal/ha and the recommended varieties are ICGS-75 and JL-24. Sowing may be done at spacing of 30 cm x 15 cm. It is recommended to apply 44 kg of urea, 375kg of SSP or 130 kg of DAP and 67 kg of MOP per ha as a basal application during final ploughing or incorporated at the time of sowing.
Kharif Maize	Sowing		Apply 60kg of urea, 65kg of DAP and 30kg of MOP per hectare as a basal application during final ploughing or at the time of sowing. For high altitude spacing may be 50cm x 25cm while for low altitude it may be 60cm x 30cm.
Blackgram & Rice bean	Land preparation to sowing		Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan.
Seeds storage	Post harvest management		- For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds. - For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% in godowns .
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Tree bean	Planting		Planting of 2 to 2.5 yrs old tree bean should be done in the pit of size 60 cm x 60 cm. The top soil should be mixed thoroughly with 5kg FYM. As a prophylactic measure against termite/ ants or other soil borne disease, Furadan 3-G @2gm/pit and Captan 50 WP or Sixer (Carbendazim + Mancozeb) @ 1 gm per pit may be incorporated in the soil before planting.
French Bean/ Bhindi	Vegetative to flowering		- Weeding may be done to avoid insect pest infestation.
Turmeric	Planting of turmeric		- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.
Cucurbits	Flowering & fruiting	Red Pumpkin Beetle	Use Methyl Euginol as trap @ 4-10 traps/ sangam. - To prevent mite in the lower surface of leaves, use Neem oil @ 2-3 ml / litre of water.
Tomato/ Brinjal	Vegetative to flowering		- Apply 25kg Urea after 25-30days of transplanting. - Weeding may be done to avoid insect pest infestation.



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Chilli/ capsicum	Vegetative to flowering		- In chillies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains. - Weeding may be done to avoid insect pest infestation.
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Animal Sciences

*** Provide clean drinking water for birds and animals.**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening. - Avoid caking of litter materials.
Sheep/ Goat	All age groups excepts the young ones	Vaccination	- Vaccinate against Enterotoxaemia and sheep pox.
		Management	- Pregnant animal (more than 6 months) should be given additional feed.
		Mineral feeding to protect (PICA)	- Mineral mixtures are to be supplemented.
		Deworming	New born but not yet been dewormed should be given deworming agent.
Pig	All age groups except the young ones	De-worming	➤ De-worming of animals should be done using Abendazole/ Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wt.
		Swine Fever	- SFV (Swine Fever vaccine) @1ml sub- cutaneously inside thigh must be administered after the age of 3 months.
		FMD	- Vaccinate against FMD after the age of 3 months.
		Mineral feeding	➤ Provide mineral mixture.
Cattle	All age groups excepts the young ones	Mites infestation	➤ Spray with Skin Heal Spray in sufficient quantity.
		Fodder cultivation	➤ Maize/ Jowar/ Bajra sown as fodder crop may be harvested after 45-50 days.
		Ectoparasites	- Butox @ 2ml/lit of water at forth nightly interval.
		Mastitis	Animals should be milked completely.
		Management	- Some female animals may get agitated due to the heat especially during night time, protect and take care of it.

Fishery

Type of Farming	Stage	management	Agro-metrological advisories
Carp culture	nurseries	Pond and water	Ponds water should be clean and clear free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m.
		Feed	Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day
		Fish	20-30 million spawn can be stock in 1 ha pond.
	Grow -out	Pond and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha. Sampling of fish for growth, diseases (if any) should be done by regular netting.
Paddy cum fish culture	Field		As the temperature has increased considerably, farmers must increase the feeding rate by 25-30% in grow-out ponds.
			Prepare trenches/channels in rice field of depth 1.0 - 1.5m can be start. 30-40% of the rice field can be converted into trenches/ditch/channels for paddy cum fish culture.

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Weather forecast for next five days of Imphal West (20th to 24th May, 2017)

Likely to have scattered rainfall over Manipur during next five days with mainly clear to partly cloudy sky and maximum temp. 30 - 32 °C & minimum temp. 21 - 22 °C. Relative humidity may reach up to 98 % (max RH) & 49 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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