



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

**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Bishnupur (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 29-30 °C & minimum temp. 23-24 °C. Relative humidity may reach upto 100 % (max RH) & 73 % (min RH). The average wind speed may be 2 km/hr.

***Field Crops***

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

***Horticulture Crops***

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Cauliflower <b>(Early)</b>	Land preparation to nursery sowing		<ul style="list-style-type: none"> <li>- Prepare raised nursery bed with temporary rain shed and drain out excess water near bed area. Apply 1-2 kg FYM/ m<sup>2</sup>of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%</li> </ul>

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**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcherries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Chandel**

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<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Chandel (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
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<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
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	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Churachandpur**

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***Field Crops***

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
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**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krish Mausam Seva”**





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

**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Imphal East**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Imphal East (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 29-31 °C & minimum temp. 22-23 °C. Relative humidity may reach upto 100 % (max RH) & 69 % (min RH). The average wind speed may be 2 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Cauliflower <b>(Early)</b>	Land preparation to nursery sowing		<ul style="list-style-type: none"> <li>- Prepare raised nursery bed with temporary rain shed and drain out excess water near bed area. Apply 1-2 kg FYM/ m<sup>2</sup>of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%</li> </ul>

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcherries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Imphal West (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 28-30 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 100 % (max RH) & 85 % (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Cauliflower <b>(Early)</b>	Land preparation to nursery sowing		<ul style="list-style-type: none"> <li>- Prepare raised nursery bed with temporary rain shed and drain out excess water near bed area. Apply 1-2 kg FYM/ m<sup>2</sup>of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%</li> </ul>

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**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcherries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”****MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Senapati**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Senapati (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 25-27 °C & minimum temp. 19-20 °C. Relative humidity may reach upto 100 % (max RH) & 75 % (min RH). The average wind speed may be 2 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

**Horticulture Crops**

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and fruiting to harvesting		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2g/ litre of water to control the fungal attack after rains.</li> </ul>
Cowpea	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon,</li> </ul>

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

			orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
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**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
<b>Pig</b>	All age groups except the young ones	• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <b>Anti-Psoroptic</b> may be used.
		• Management	• Breeding must be advocated continuously. • Protect from thunder showers especially during night.
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-meteorological advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO <sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days. - Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.

(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****22<sup>nd</sup> June, 2018****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Tamenglong (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 26-28 °C & minimum temp. 20-22 °C. Relative humidity may reach upto 100 % (max RH) & 74 % (min RH). The average wind speed may be 2-3 km/hr.

***Field Crops***

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

***Horticulture Crops***

<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Cauliflower <b>(Early)</b>	Land preparation to nursery sowing		<ul style="list-style-type: none"> <li>- Prepare raised nursery bed with temporary rain shed and drain out excess water near bed area. Apply 1-2 kg FYM/ m<sup>2</sup>of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%</li> </ul>

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcherries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishि Mausam Seva”**





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

**MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Thoubal (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 28-30 °C & minimum temp. 23-24 °C. Relative humidity may reach upto 100 % (max RH) & 85 % (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Cauliflower <b>(Early)</b>	Land preparation to nursery sowing		<ul style="list-style-type: none"> <li>- Prepare raised nursery bed with temporary rain shed and drain out excess water near bed area. Apply 1-2 kg FYM/ m<sup>2</sup>of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%</li> </ul>

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

	fruiting to harvesting		WP) @ 2g/ litre of water to control the fungal attack after rains.
<b>Cowpea</b>	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc.</li> <li>- Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing.</li> <li>- Recommended varieties: Yard long bean &amp; Pusa Barsati.</li> </ul>

**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	<ul style="list-style-type: none"> <li>• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.</li> </ul>
		• Endoparasites	<ul style="list-style-type: none"> <li>• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.</li> </ul>
		• Coccidiosis	<ul style="list-style-type: none"> <li>• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.</li> </ul>
<b>Sheep/ Goat</b>	All age groups	• Vaccination	<ul style="list-style-type: none"> <li>• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Fly repellent must be used in the premises of the sheds.</li> <li>• Protect from thunder showers. Protect from after winds (loo).</li> </ul>
<b>Pig</b>	All age groups except the young ones	• De-worming	<ul style="list-style-type: none"> <li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li> </ul>
		• Skin disease	<ul style="list-style-type: none"> <li>• Sprayer of <i>Anti-Psoroptic</i> may be used.</li> </ul>
		• Management	<ul style="list-style-type: none"> <li>• Breeding must be advocated continuously.</li> <li>• Protect from thunder showers especially during night.</li> </ul>
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	<ul style="list-style-type: none"> <li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li> <li>• Cases of H.S. may be encountered during this period. Immediate treatment using appropriate drugs with the help of Consultant must be advocated to safe the animals.</li> <li>• Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.</li> </ul>
		• Deworming	<ul style="list-style-type: none"> <li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li> </ul>
		• Care & Management	<ul style="list-style-type: none"> <li>• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.</li> </ul>

**Fishery**

\* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrollogical advisories
<b>Carp culture</b>	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ <b>0.5 - 0.7 ml/kg</b> of fish.
	Hatcherries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.
	Carp diseases	Argulus (fish lice) infection	<ul style="list-style-type: none"> <li>- Remove all the fishes and give a bath treatment for 15 min per day in a solution of 1g KMnO<sub>4</sub> (Potassium permanganate) in 10 litres of water for 5-7 days.</li> <li>- Treat one hectare pond with a mixture of 100kg Common Salt + 10 kg Garlic paste soaked overnight.</li> </ul>
		EUS (Epizostic Ulcerative Syndrome)	- Spray CIFAX @ 1 litre/ 100 litre of water for one hectare fish pond with EUS infected fishes.



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



**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”****MANIPUR BULLETIN****22<sup>nd</sup> June, 2018****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23<sup>rd</sup> to 27<sup>th</sup> June, 2018 as below:

<b>Significant past weather for the preceding bi-weekly of Imphal - West (19<sup>th</sup> to 21<sup>st</sup> June, 2018)</b>	<b>Weather forecast for next five days of Ukhrul (23<sup>rd</sup> to 27<sup>th</sup> June, 2018)</b>
Observed 5.2 mm rainfall with mainly cloudy to overcast sky but partly cloudy sky during afternoon hours of 19 <sup>th</sup> and 20 <sup>th</sup> June. Maximum temperature recorded ranged from 27.7 to 30.4 °C and minimum of 22.0 to 22.5 °C with mean relative humidity 85.7 % max and 67.7 % min was recorded in the past three days with average wind speed was 2.0 – 4.7 km/ hr.	Likely to have light rains upto Saturday and heavy rains from Sunday and mainly cloudy to overcast sky with maximum temp. 26-28 °C & minimum temp. 20-22 °C. Relative humidity may reach upto 100 % (max RH) & 91 % (min RH). The average wind speed may be 2-3 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Rice	Grain filling stage <b>(Pre-kharif rice)</b>		<ul style="list-style-type: none"> <li>- Construct bands around the crop field to maintain water level at 5-8 cm.</li> <li>- Drain out excess water from the field if accumulated due to heavy rains from Sunday.</li> </ul>
		Bacterial leaf blight	<ul style="list-style-type: none"> <li>- Spray Streptocycline @ 1gm/15 litres of water after rains.</li> </ul>
		Sheath blight/ sheath rot	<ul style="list-style-type: none"> <li>- Apply Propiconazole @ 15ml/ 15 litres water after rains.</li> </ul>
	Nursery and land preparation of main field and transplanting <b>(Kharif rice)</b>		<ul style="list-style-type: none"> <li>- Recommended varieties: RC Maniphou-7, RC Maniphou- 10 and RC Maniphou-13. Raise rice nursery.</li> <li>- Encircle the nursery plot with happen after sowing at least for 10 days so that the seeds are not carried away if water level increases due to rains.</li> <li>- Land preparation of main field may be done for transplanting rice seedling and submerge it for 15- 20 days. Apply 65 kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling before transplanting.</li> <li>- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days.</li> </ul>
Kharif Maize	Vegetative		<ul style="list-style-type: none"> <li>- For the crops in vegetative phase, weeding may be done after rain by hand or apply Simazine @ 0.75 kg a.i./ ha.</li> </ul>
Soybean/ Groundnut	Vegetative		<ul style="list-style-type: none"> <li>- Hand weeding should be done before 30-35 days after sowing or Fluchloralin 45EC may be applied @ 0.75 kg/ha as pre-planting soil incorporation for effective control of weeds in soybean and groundnut. Also, earthing-up and thinning may be done after rains.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Blackgram/ Rice Bean	Vegetative		<ul style="list-style-type: none"> <li>- Weeding may be done after rain if the weed population is high.</li> <li>- Monitor for insect pest infestation.</li> </ul>
Seeds storage	Post harvest management		<p>For seed purpose store the seeds in <b>RC-Seed Bin</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
Citrus			<ul style="list-style-type: none"> <li>- Spray Ridomil (2.5g/lit) + Monocrotophos (1ml/lit) to avoid the attack of insect pest and disease.</li> </ul>
Turmeric	Vegetative		<ul style="list-style-type: none"> <li>- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.</li> </ul>
Colocassia	Vegetative		<ul style="list-style-type: none"> <li>- Weeding and earthing up may be done after the wet spell.</li> <li>- Avoid water logging.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Chilli/ capsicum	Flowering and fruiting to harvesting		<ul style="list-style-type: none"> <li>- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2g/ litre of water to control the fungal attack after rains.</li> </ul>
Cowpea	Sowing		<ul style="list-style-type: none"> <li>- Cowpea may be sown as an intercrop in the fruit orchard such as lemon,</li> </ul>

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**“Gramin Krishi Mausam Seva”**

			orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati.
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**Animal Sciences**

\* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Ranikhet disease	• Strongly advised to vaccinate against Ranikhet disease. Vaccinate the flock using Lasota strain vaccine through ocular route if the age of chick is less than 21 days and through nasal route if it is older than 21 days.
		• Endoparasites	• De-worm using Levamizole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
		• Coccidiosis	• Give Amprolium @ 2 gms/ litre of drinking water for 5-7 days.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Management	• Fly repellent must be used in the premises of the sheds. • Protect from thunder showers. Protect from after winds (loo).
<b>Pig</b>	All age groups except the young ones	• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Skin disease	• Sprayer of <b>Anti-Psoroptic</b> may be used.
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(I. Meghachandra Singh)  
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