

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

E-mail: agromet\_mnp@yahoo.co.uk



# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### **Chandel**

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Chandel (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	
hours of 5 <sup>th</sup> June and 68.2 mm rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 28 - 31 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	21 - 23 °C. Relative humidity may reach up to 97 % (max RH) & 72 %
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 3-6 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		I	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 <sup>1</sup>/<sub>2</sub> month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 <sup>1</sup>/<sub>2</sub> month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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# "Gramin Krishi Mausam Seva"



Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg
	Elementaria e en d		Urea and 300kg kg SSP at 2-3 months.         - Apply 25kg Urea after 25-30days of transplanting.
Tomoto/Duinial	Flowering and fruiting to		
Tomato/ Brinja	harvesting		- Weeding may be done to avoid insect pest infestation.
Chilli/ consistent			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
Chilli/ capsicum	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation.
Animal Sciences			- weeding may be done to avoid insect pest intestation.
	rinking water for birds	and animals.	
Name of bird/ anin		Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
	001	Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/	/		<ul> <li>Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next</li> </ul>
Turkey/ Duck)		Deworming	day with half the dose at regular interval of 3 weeks.
v /			- 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	Vaccination	- Sheep should be vaccinated against B.Q.
<b>F</b>		De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
D' -	All age groups	Vaccination	- Vaccinate against FMD.
Pig	except the young ones	Management	- Provide adequate amount of wholesome water (drinking).
	ones	8	- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the youn		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
		ε	Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			Increase salt level in feed.
Fishery:			·
* Encircle pond wi	th happa net or raise the	pond dyke height to av	void escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
F	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.



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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

# Churachandpur

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Churachandpur (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and 68.2 mm rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 29 - 31 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	21 - 23 ° C. Relative humidity may reach up to 99 % (max RH) & 78 %
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 2 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		•	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</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>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg Urea and 300kg kg SSP at 2-3 months.
Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
fruiting to		- Weeding may be done to avoid insect pest infestation.
harvesting		
		- In chilies 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.
ē	Management	Agro-meteorological advisories
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.
All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
	De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
	Vaccination	- Vaccinate against FMD.
ones	Management	- Provide adequate amount of wholesome water (drinking).
		- Essential body salts may be provided.
		Vaccinate against B.Q. & H.S.
		Deworm with Tolzan- F
ones	Management	Provide wholesome water.
		Protection from high temp may be ensured.
		Electrolytes in the form of powder/ liquid may be given.
		Increase salt level in feed.
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		Agro-metrological advisories
-	Pond and water	Maintain minimum depth of 1.5 m.
out		Apply Lime/ Green AQ for maintaining good quality water.
	Feed	Provide 2-3 times @ 5-10% body weight per day.
		Provide good feed having 30% crude protein fortified with vitamins and mineral.
Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
		Provide feed @ 3-5 % body weight per day.
	TT	
Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal: 0.5-0.7 ml/kg for grass
Breeding	Hormone	brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
_	Hormone	brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.
Breeding Seed production	Hormone	<ul> <li>brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.</li> <li>Maintain good quality water having p<sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO<sub>2</sub>: Nil</li> </ul>
Seed production		<ul> <li>brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.</li> <li>Maintain good quality water having p<sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO<sub>2</sub>: Nil – 0.3ppm and alkalinity 70-110 ppm.</li> </ul>
_	Hormone water	<ul> <li>brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass carp.</li> <li>Maintain good quality water having p<sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO<sub>2</sub>: Nil</li> </ul>
	fruiting to harvesting         Flowering and fruiting to harvesting         inking water for birds         inal       Stage         All age groups         Nurseries/ grow- out	fruiting to harvesting       Flowering and fruiting to harvesting         in Flowering and fruiting to harvesting       Disease and Management         inal       Stage       Disease and Management         inal       Stage       Disease and Management         All age groups       Fowl Pox         Coccidiosis       Deworming         All age groups       Vaccination         All age groups       B.Q. & H.S.         except the young ones       Deworming         Management       Management         th happa net or raise the pond dyke height to av         Stage       Management         Nurseries/ grow-       Pond and water

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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### Senapati

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Senapati (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	
hours of 5 <sup>th</sup> June and <b>68.2 mm</b> rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 28 - 31 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	19 - 21 °C. Relative humidity may reach up to 97 % (max RH) & 50 %
max and 79.5 % min was recorded in the past four days.	(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
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul> <li>Weeding may be done to avoid insect pest infestation.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>



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# "Gramin Krishi Mausam Seva"



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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

# Tamenglong

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Tamenglong (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and 68.2 mm rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 30 - 32 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 2 km/hr.

Field Crops Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Name of the crop	Grain filling (Pre-kharif rice)	rest and disease	- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling. Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Avoid water logging in the crop field.</li> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 <sup>1</sup>/<sub>2</sub> month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 <sup>1</sup>/<sub>2</sub> month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul> <li>Weeding may be done to avoid insect pest infestation.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>



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# "Gramin Krishi Mausam Seva"



Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg
			Urea and 300kg kg SSP at 2-3 months.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinja			- Weeding may be done to avoid insect pest infestation.
	harvesting		
Chilli/ capsicum			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
4 . 10.	harvesting		- Weeding may be done to avoid insect pest infestation.
<u>Animal Sciences</u> * Provide clean d	s rinking water for birds	and animals.	
Name of bird/ anir		Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken	1		<ul> <li>Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next</li> </ul>
Turkey/ Duck)	,	Deworming	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.
	4.11	<b>X</b> 7 · .·	- Avoid caking of litter materials.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
	All age groups	De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
Pig	except the young	Vaccination	- Vaccinate against FMD.
0	ones	Management	<ul><li>Provide adequate amount of wholesome water (drinking).</li><li>Essential body salts may be provided.</li></ul>
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the youn		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			Increase salt level in feed.
Fishery:			· ·
* Encircle pond w	ith happa net or raise the	pond dyke height to av	void escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
	D II	11	Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
	Cool and the		carp.
	Seed production		Maintain good quality water having $p^{H}$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil
	II ( 1		– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.



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

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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### Thoubal

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Thoubal (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and <b>68.2 mm</b> rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 31 - 33 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	22 - 23 ° C. Relative humidity may reach up to 99 % (max RH) & 69 %
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		I	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 <sup>1</sup>/<sub>2</sub> month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 <sup>1</sup>/<sub>2</sub> month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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

# "Gramin Krishi Mausam Seva"



Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg
	Elementaria e en d		Urea and 300kg kg SSP at 2-3 months.         - Apply 25kg Urea after 25-30days of transplanting.
Tomata / Drinial	Flowering and fruiting to		
Tomato/ Brinja	harvesting		- Weeding may be done to avoid insect pest infestation.
Chilli/ consistent			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
Chilli/ capsicum	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation.
Animal Sciences			- weeding may be done to avoid insect pest intestation.
	rinking water for birds	and animals.	
Name of bird/ anin		Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
	001	Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/	/		<ul> <li>Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next</li> </ul>
Turkey/ Duck)		Deworming	day with half the dose at regular interval of 3 weeks.
v /			- 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	Vaccination	- Sheep should be vaccinated against B.Q.
<b>F</b>		De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
D' -	All age groups	Vaccination	- Vaccinate against FMD.
Pig	except the young ones	Management	- Provide adequate amount of wholesome water (drinking).
	ones	8	- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the youn		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
		ε	Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			Increase salt level in feed.
Fishery:			·
* Encircle pond wi	th happa net or raise the	pond dyke height to av	void escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.



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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### **Ukhrul**

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Ukhrul (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	
hours of 5 <sup>th</sup> June and <b>68.2 mm</b> rainfall was recorded during past four days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	with mainly clear to partly cloudy sky upto $7^{\text{th}}$ then mainly cloudy to overcast sky thereafter and maximum temp. 28 - 30 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	20 - 22 °C. Relative humidity may reach up to 96 % (max RH) & 62 %
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 2-4 km/hr.

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		•	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</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>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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

# "Gramin Krishi Mausam Seva"



Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg Urea and 300kg kg SSP at 2-3 months.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinjal			- Weeding may be done to avoid insect pest infestation.
Tomato/ Drinja	harvesting		- weeding may be done to avoid insect pest intestation.
	· · · · ·		- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
Chilli/ capsicum	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation.
A			- weeding may be done to avoid insect pest intestation.
<u>Animal Sciences</u> * Provide clean di	rinking water for birds	and animals.	
Name of bird/ anin		Disease and	Agro-meteorological advisories
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/	/		
Turkey/ Duck)		Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next dow with helf the does at regular interval of 2 works.
			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.
	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
Sheep/ Goat	All age groups		
	All age groups	De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
Pig	except the young	Vaccination	- Vaccinate against FMD.
0	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the youn		Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			Increase salt level in feed.
Fishery:			
-	ith happa net or raise the		roid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having $p^{H}$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.

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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### **Imphal East**

Significant past weather for the preceding bi-weekly of	Weather forecast for next five days of Imphal East
Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	(7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and 68.2 mm rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 30 - 32 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	21 - 23 °C. Relative humidity may reach up to 99 % (max RH) & 55 %
max and 79.5 % min was recorded in the past four days.	(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
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		•	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 ½ month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 ½ month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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

# "Gramin Krishi Mausam Seva"

Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg
			Urea and 300kg kg SSP at 2-3 months.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinja	fruiting to harvesting		- Weeding may be done to avoid insect pest infestation.
Chilli/ capsicun			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
	harvesting		- Weeding may be done to avoid insect pest infestation.
Animal Sciences		de and animals	
Name of bird/ anii	rinking water for bir nal Stage	Disease and	Agro-meteorological advisories
Ivalle of biru/ and		Management	
	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken Turkey/ Duck)	/	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	Vaccination	- Sheep should be vaccinated against B.Q.
	All age groups	De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
Pig	except the your		- Vaccinate against FMD.
8	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups		Vaccinate against B.Q. & H.S.
<b>aa</b>	excepts the you	· · · · · · · · · · · · · · · · · · ·	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
Fishery:			<ul> <li>Increase salt level in feed.</li> </ul>
	ith happa net or raise t	he pond dyke height to av	oid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
-			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having $p^H$ 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil – 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.



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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### Imphal West

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Imphal West (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and <b>68.2 mm</b> rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 31 - 33 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	22 - 23 ° C. Relative humidity may reach up to 99 % (max RH) & 58 %
max and 79.5 % min was recorded in the past four days.	(min RH). The average wind speed may be 2 km/hr.

Field Crops	C.		
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
	Grain filling (Pre-kharif rice)		- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul> <li>Weeding may be done at 30 and 45 days after sowing of crop.</li> <li>Construct proper drainage system to avoid water logging in the crop field.</li> </ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Avoid water logging in the crop field.</li> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops		•	
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 <sup>1</sup>/<sub>2</sub> month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 <sup>1</sup>/<sub>2</sub> month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul> <li>Weeding may be done to avoid insect pest infestation.</li> <li>Retain healthy disease free fruits for seeds.</li> </ul>



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

# "Gramin Krishi Mausam Seva"



Turmeric	Vegetative		- Weeding and interculture operation may be done after rains and apply 100kg
			Urea and 300kg kg SSP at 2-3 months.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinjal			- Weeding may be done to avoid insect pest infestation.
	harvesting		
Chilli/ capsicum			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63%
	fruiting to		WP) @ 2 g/ litre of water to control the fungal attack after rains.
4 • • • • • •	harvesting		- Weeding may be done to avoid insect pest infestation.
Animal Sciences		1	
* Provide clean di Name of bird/ anin	rinking water for bird		A must be characterized a distant of
Name of bird/ anin	nal Stage	Disease and Management	Agro-meteorological advisories
	All age groups	Fowl Pox	Vaccinate against fowl pox.
	All age gloups		
	,	Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Poultry (Chicken/		Deworming	➢ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next
Turkey/ Duck)			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	Vaccination	- Sheep should be vaccinated against B.Q.
	All age groups	De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
Pig	except the youn	<sub>9</sub> Vaccination	- Vaccinate against FMD.
8	ones	Management	- Provide adequate amount of wholesome water (drinking).
			- Essential body salts may be provided.
	All age groups	B.Q. & H.S.	Vaccinate against B.Q. & H.S.
	excepts the you	-	Deworm with Tolzan- F
Cattle	ones	Management	Provide wholesome water.
			Protection from high temp may be ensured.
			Electrolytes in the form of powder/ liquid may be given.
			Increase salt level in feed.
Fishery:			
* Encircle pond wi	th happa net or raise th	e pond dyke height to av	oid escape of fis hes.
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Nurseries/ grow-	Pond and water	Maintain minimum depth of 1.5 m.
1	out		Apply Lime/ Green AQ for maintaining good quality water.
		Feed	Provide 2-3 times @ 5-10% body weight per day.
			Provide good feed having 30% crude protein fortified with vitamins and mineral.
	Brooder	Pond water and feed	Maintain minimum depth of 2.0-2.2 m.
			Provide feed @ 3-5 % body weight per day.
	Breeding	Hormone	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the
			brooders @ 0.5 ml/kg of fish for catla, rohu and mirgal; 0.5-0.7 ml/kg for grass
			carp.
	Seed production		Maintain good quality water having p <sup>H</sup> 7-8, Dissolved Oxygen: 5-8ppm; CO <sub>2</sub> : Nil
			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
			should not be given for 3 days.

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

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# MANIPUR BULLETIN 6<sup>th</sup> June, 2017

#### **Bishnupur**

Significant past weather for the preceding bi-weekly of Imphal - West (2 <sup>nd</sup> to 5 <sup>th</sup> June, 2017)	Weather forecast for next five days of Bishnupur (7 <sup>th</sup> to 11 <sup>th</sup> June, 2017)
Observed mainly cloudy to overcast but mainly clear during afternoon	Likely to have heavy rainfall at isolated places over Manipur from 8 <sup>th</sup> June
hours of 5 <sup>th</sup> June and 68.2 mm rainfall was recorded during past four	with mainly clear to partly cloudy sky upto 7 <sup>th</sup> then mainly cloudy to
days. Maximum temperature range of 21.5 to 29.0 ° C and minimum	overcast sky thereafter and maximum temp. 31 - 33 °C & minimum temp.
temperature range of 19.2 to 21.9 °C with mean relative humidity 93.0 %	23 - 24 ° C. Relative humidity may reach up to 99 % (max RH) & 66 %
max and 79.5 % min was recorded in the past four days.	(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
Traine of the crop	Grain filling (Pre-kharif rice)	I est and disease	- Maintain water level at 5-8 cm. Drain out excess water if accumulated in the crop field due to rains.
Rice	Nursery to land preparation for transplanting (kharif rice)		<ul> <li>Maintain water level to just submerge soil surface and expose the green aerial sprout after sowing.</li> <li>Land preparation of main field may be started for transplanting rice seedling.</li> <li>Apply 65kg Urea, 250 kg SSP and 45 kg MOP per hectare at the time of final leveling.</li> </ul>
Soybean / Groundnut	Vegetative		<ul><li>Weeding may be done at 30 and 45 days after sowing of crop.</li><li>Construct proper drainage system to avoid water logging in the crop field.</li></ul>
Kharif Maize	Vegetative		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. - Avoid weeds in crop field. - Avoid water logging in the crop field.
Blackgram & Rice bean	Sowing to vegetative		<ul> <li>Treat the seed with Thiram or Captan before sowing @ 2g/kg seeds.</li> <li>Avoid weeds in crop field.</li> <li>Avoid water logging in the crop field.</li> </ul>
Seeds storage	Post harvest management		<ul> <li>For seed purpose dry, clean and store the seeds in <i>RC-seed bins</i> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of seeds.</li> <li>For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Colocasia	Vegetative		<ul> <li>At present, earthing up may be done at 1 or 1 <sup>1</sup>/<sub>2</sub> month old plants (for normal sowing) and for late sown crops it may be done just after sprouting and second weeding after 1 or 1 <sup>1</sup>/<sub>2</sub> month.</li> <li>- 45-50 days old plants may be top dressed with 4.5kg Urea + 156kg SSP/ sangam.</li> <li>- Prophylactic measures against leaf blight should be taken up. Spray Redomil@</li> <li>1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.</li> </ul>
Cauliflower	Nursery		- Preparation of nursery may be started for early cauliflower in the upland area or in rain protective structures are available with the farmers.
Cowpea	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For present season varieties recommended are- Pusa Barsati, Pusa Do- fasli & Long green.
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 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	Flowering and fruiting to harvesting		<ul><li>Weeding may be done to avoid insect pest infestation.</li><li>Retain healthy disease free fruits for seeds.</li></ul>



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			Urea and 300kg kg SSP at 2-3 months.
	Flowering and		- Apply 25kg Urea after 25-30days of transplanting.
Tomato/ Brinja			- Weeding may be done to avoid insect pest infestation.
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Chilli/ capsicum			- In chilies and capsicum, spray Sixer (Carbendazim 12% WP + Mancozeb 63% WP) @ 2 g/ litre of water to control the fungal attack after rains.
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		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
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Turkey/ Duck)		Deworming	Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with helf the days at a walks interval of 2 works.
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			ORS during evening.
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Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q.
<b>F</b>		De-worming	- De-worming of animals should be done using Abendazole @7.5 mg/kg b.wt.
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Cattle	ones	Management	Provide wholesome water.
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			– 0.3ppm and alkalinity 70-110 ppm.
	Hatcheries	water	Hatching can be done in traditional hapas having outer & inner hapas or circular
			1hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed
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