

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



"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Chandel (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 32.0 °C & minimum temp. 17.0 - 21.0 °C. Relative humidity may reach upto 84 % (max RH) & 49 % (min RH). The average wind speed may be 4-5 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		Drain out excess rain water if accumulated due to rain in crop field.Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			· · · · · · · · · · · · · · · · · · ·
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya	Transplanting				- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the		
					seeded or grafted seedlings from a reliable source Avoid water logging area, frost prone or area where high wind speed is		
					experienced.		
					- Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.		
Turmeric	Sowing of turm	eric			- Planting of Turmeric may be done in upland area.		
					- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or		
					Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm.		
Tree Bean	Nursery prepara	ation			Collect disease free mature and good quality tree bean pods. Procure		
					items below for nursery raising:		
G 14	X7				Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Cucurbits	Vegetative to flowering and				Weeding may be done.Provide proper staking to support plants and avoid fruits to touch		
	fruiting				soil.		
					- Rotting of young fruits/ premature ripening of fruits if observed		
					then Methyl Eugenol or Beculure may be used as pheromone trap for		
					fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.		
Animal Sciences					may also be used.		
	water must be pro	vided	after adding po	tassium p	permanganate/ sanitizer for drinking water.		
Pond water must be g			ment.	_	- , 0		
Name of the animal	Growth stage		Disease/ infests		Agro-meteorological advisories		
Poultry (Chicken/	All age groups				- Bleaching powder may be spread near farm premises.		
Turkey/ Duck)					- To avoid dehydration give vit C in drinking water along with other vitamins/ ORS during evening.		
					- Avoid caking of litter materials.		
			Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.		
Sheep/ Goat	Above 3 months						
	age (as and when required)		Haemorhagic		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the		
	required)		Septicaemia and F.M.D.		diseases mentioned.		
Pig	All age groups				Wholesome/ clear water must be provided after adding potassium		
					permanganate/ sanitizer for drinking water.		
Cattle / Buffalo/	Above 3 months	of	Skin infections		Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the animal using the		
Mithun	age (as and when		Skin injections		solution at 15 days interval.		
1711011011	required)	J \			* For Mithun, give Ivermectin @ 200 mg per kg body weight at the		
					time of salt feeding.		
			Black Quarter		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases		
			Haemorhagic Septicaemia	:	mentioned.		
			F.M.D.		- Vaccinate against F.M.D.		
Fishery:	1		1				
-	eeding	Pond	and water	- Bund	breeding can be started.		
				- Water	r quality in breeding pool should be clean, apply lime to maintain		
				optimum p ^H with high dissolved oxygen for intensive induced breeding			
233	rseries	Pond	and water	program	mme. management should be started for stocking fish spawns. Maintain		
nu	11 301103	1 OHU	and water		lepth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H .		
					y a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP		
				in nurse	ery pond water 15 days before spawn stocking.		
		Feed			alanced feeds should be provided 2-3 times a day @ 5-10% body		
		Fish		weight/day 20-30 million spawn can be stocked in 1 ha pond.			
Gt			and water		Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days		
	Grow -out		1 one and water		6		



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"Gramin Krishi Mausam Seva"

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular
			netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3
			splits.
Paddy cum	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture			30-40% of the field can be converted into trench/pond for fish culture.



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"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, \ 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Churachandpur $(13^{th}\ to\ 17^{th}\ May,\ 2015)$

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 - 31.0 °C & minimum temp. 19.0 - 20.0 °C. Relative humidity may reach upto 95 % (max RH) & 57 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		Drain out excess rain water if accumulated due to rain in crop field.Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 - 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			· · · · · · · · · · · · · · · · · · ·
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya		Transplanting				 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area, frost prone or area where high wind speed is experienced. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil. 		
Turmeric		Sowing of turn	neric			 Planting of Turmeric may be done in upland area. Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm. 		
Tree Bean		Nursery prepar	ration			Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Cucurbits		Vegetative to flowering and fruiting				 Weeding may be done. Provide proper staking to support plants and avoid fruits to touch soil. Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used. 		
Animal Scienc	es					may also be used.		
* Wholesome/ ci Pond water mus	lear w t be g	iven after prope		nent.		permanganate/ sanitizer for drinking water.		
Name of the animal		Growth stage		Disease/ infesta	ation	Agro-meteorological advisories		
Poultry (Chicken/ Turkey/ Duck) All age groups			Coccidiosis		 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. Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days. 			
Sheep/ Goat		Above 3 months of age (as and when required)		Black Quarter/ Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.		
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.		
Cattle / Buffalo Mithun	/	Above 3 months age (as and when required)			3	- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.		
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned. - Vaccinate against F.M.D.		
Fishery:				<u>]</u>				
Carp culture	Carp culture breeding Pond		Pond	- Wat		d breeding can be started. er quality in breeding pool should be clean, apply lime to maintain um p ^H with high dissolved oxygen for intensive induced breeding amme.		
			Pond and water		- Pond water - App in nur	d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . ly a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP sery pond water 15 days before spawn stocking.		
			Feed			Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day		
Grow -out			Fish Pond and water		20-30 million spawn can be stocked in 1 ha pond. Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days			



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			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular
			netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3
			splits.
Paddy cum	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture			30-40% of the field can be converted into trench/pond for fish culture.



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Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

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During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Imphal- East $(13^{th} to 17^{th} May, 2015)$

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 - 31.0 °C & minimum temp. 18.0 - 21.0 °C. Relative humidity may reach upto 98 % (max RH) & 77 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		Drain out excess rain water if accumulated due to rain in crop field.Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. - Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			•
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya		Transplanting				 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area, frost prone or area where high wind speed is experienced. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil. 		
Turmeric		Sowing of turn	neric			 Planting of Turmeric may be done in upland area. Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed. Maintain spacing at 25cm X 40-45cm. 		
Tree Bean		Nursery prepar	ation			Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Cucurbits		Vegetative to flowering and fruiting				 Weeding may be done. Provide proper staking to support plants and avoid fruits to touch soil. Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used. 		
* Wholesome/ co	lear v				tassium	permanganate/ sanitizer for drinking water.		
Name of the animal		Growth stage	, irean	Disease/ infesta	ation	Agro-meteorological advisories		
		All age groups				 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. 		
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.		
Sheep/ Goat		Above 3 months of age (as and when required)		Black Quarter/ Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.		
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.		
Cattle / Buffalo Mithun	/	Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.		
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned. - Vaccinate against F.M.D.		
Fishery:		<u>I</u>		J.				
Carp culture	Carp culture breeding Pond a		- Wat		d breeding can be started. er quality in breeding pool should be clean, apply lime to maintain turn p ^H with high dissolved oxygen for intensive induced breeding amme.			
			Pond	Pond and water		d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . sly a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP resery pond water 15 days before spawn stocking.		
			Feed Fish		Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day 20-30 million spawn can be stocked in 1 ha pond.			
	Grow -out		Pond	Pond and water		Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days		



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			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular
			netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3
			splits.
Paddy cum	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture			30-40% of the field can be converted into trench/pond for fish culture.



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MANIPUR BULLETIN 12th May, 2015

Imphal-West

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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
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Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Tree Bean		Nursery prepar	ation			Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.		
Cucurbits		Vegetative to flowering and fruiting				 Weeding may be done. Provide proper staking to support plants and avoid fruits to touch soil. Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used. 		
* Wholesome/ co	lear v				tassium	permanganate/ sanitizer for drinking water.		
Name of the animal		Growth stage	, irean	Disease/ infesta	ation	Agro-meteorological advisories		
		All age groups				 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. 		
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.		
Sheep/ Goat		Above 3 months of age (as and when required)		Black Quarter/ Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.		
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.		
Cattle / Buffalo Mithun	/	Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.		
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned. - Vaccinate against F.M.D.		
Fishery:		<u>I</u>		J.				
Carp culture	Carp culture breeding Pond a		- Wat		d breeding can be started. er quality in breeding pool should be clean, apply lime to maintain turn p ^H with high dissolved oxygen for intensive induced breeding amme.			
			Pond	Pond and water		d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . sly a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP resery pond water 15 days before spawn stocking.		
			Feed Fish		Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day 20-30 million spawn can be stocked in 1 ha pond.			
	Grow -out		Pond	Pond and water		Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days		



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"Gramin Krishi Mausam Seva"

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular
			netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3
			splits.
Paddy cum	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture			30-40% of the field can be converted into trench/pond for fish culture.



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



"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, \ 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Senapati (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 25.0 - 29.0 °C & minimum temp. 14.0 - 18.0 °C. Relative humidity may reach upto 94 % (max RH) & 69 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			·
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs Prepare nursery bed of 700 m ² area, apply well decomposed FYM/compost @ 1 t/ 700 m ² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		 Drain out excess rain water if accumulated due to rain in crop field. Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing of to	ırmeric			- Planting of Turmeric may be done in upland area Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg
TD D	N				seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean	Nursery pre	Nursery preparation			Collect disease free mature and good quality tree bean pods. Procure
					items below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetative t	n			- Weeding may be done.
Cucuibits	flowering ar				- Provide proper staking to support plants and avoid fruits to touch
	fruiting				soil.
					- Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.
Animal Science					
* Wholesome/ cle Pond water must				tassiun	n permanganate/ sanitizer for drinking water.
Name of the animal	Growth stage	•	Disease/ infest	ation	Agro-meteorological advisories
Poultry (Chicker	All age group	s			- Bleaching powder may be spread near farm premises.
Turkey/ Duck)					- To avoid dehydration give vit C in drinking water along with other
					vitamins/ ORS during evening.
					Avoid caking of litter materials.Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Cham/Cast	Sheep/ Goat Above 3 months of		Coccidiosis Black Quarter/		- Give Ampronum Powder @ 2g/nt of drinking water for 3 to 7 days.
Sheep/ Goat		age (as and when		/	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the
	required)		Haemorhagic Septicaemia an	nd	diseases mentioned.
			F.M.D.		discusses inclinioned.
Pig	All age groups Preventive			Wholesome/ clear water must be provided after adding potassium	
					permanganate/ sanitizer for drinking water.
					Pond water must be given after proper treatment.
Cattle / Buffalo/	Above 3 mon age (as and w		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the
Mithun	required)	iicii			solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the
	1				time of salt feeding.
			Black Quarter	/	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases
			Haemorhagic		mentioned.
			Septicaemia		
					- Vaccinate against F.M.D.
Fishery:			<u>'</u>		
Carp culture	breeding	Pond	and water	- Bun	d breeding can be started.
_					ter quality in breeding pool should be clean, apply lime to maintain
					num p ^H with high dissolved oxygen for intensive induced breeding
•					ramme.
	nurseries	Pond	and water		d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H .
					oly a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP
					rsery pond water 15 days before spawn stocking.
		Feed			balanced feeds should be provided 2-3 times a day @ 5-10% body
					nt/day
					million spawn can be stocked in 1 ha pond.
		Fish		20-30	
	Grow -out		and water	Regu	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days
	Grow -out	Pond	and water	Regu shoul	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done.
	Grow -out		and water	Regu shoul 8000	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done10,000 fingerlings can be stocked per ha.
	Grow -out	Pond	and water	Regu shoul 8000 Samp	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done10,000 fingerlings can be stocked per ha. bling of fish for growth, diseases (if any) should be done by regular
	Grow -out	Pond		Regu shoul 8000- Samp nettin	lar manuring with a slurry of RCD @1500kg/ha at interval of 30 days d be done10,000 fingerlings can be stocked per ha. bling of fish for growth, diseases (if any) should be done by regular



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Paddy cum	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture		30-40% of the field can be converted into trench/pond for fish culture.
	·	-



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"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Tamenglong (13th to 17th May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 - 32.0 °C & minimum temp. 17.0 - 22.0 °C. Relative humidity may reach upto 97 % (max RH) & 65 % (min RH). The average wind speed may be 2-3 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		- For main kharif the soil may be opened with tillers or disc ploughs Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		 Drain out excess rain water if accumulated due to rain in crop field. Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya		Transplanting				- In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source.
						- Avoid water logging area, frost prone or area where high wind speed is experienced.
						- Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.
Turmeric		Sowing of turn	neric			- Planting of Turmeric may be done in upland area.
						- Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg
						seed. Maintain spacing at 25cm X 40-45cm.
Tree Bean		Nursery prepar	ation			Collect disease free mature and good quality tree bean pods. Procure
						items below for nursery raising:
Cucurbits		Vegetative to				Sand, soil polybag/ pro-tray and chemicals for seed treatment Weeding may be done.
Cucuibits		flowering and				- Provide proper staking to support plants and avoid fruits to touch
		fruiting				soil.
						- Rotting of young fruits/ premature ripening of fruits if observed
						then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil
						may also be used.
Animal Science	es			J		
* Wholesome/ c	lear w	vater must be pro	ovided	after adding po	tassium	permanganate/ sanitizer for drinking water.
Pond water mus			r treat			
Name of the anima		Growth stage	Disease/ infesta		ation	Agro-meteorological advisories
Poultry (Chicko Turkey/ Duck)	en/	All age groups				Bleaching powder may be spread near farm premises.To avoid dehydration give vit C in drinking water along with other
Turkey/ Buck)						vitamins/ ORS during evening.
						- Avoid caking of litter materials.
			Coccidiosis			- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat		Above 3 months of age (as and when		Black Quarter/		Washington and D.O./H.G. and EMD.
		required)	.1	Haemorhagic Septicaemia and		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
		,		F.M.D.		discuses includied.
Pig		All age groups		Preventive		Wholesome/ clear water must be provided after adding potassium
				measures		permanganate/ sanitizer for drinking water.
Cattle / Buffalo	./	Above 3 months	of	Skin infections	2	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the animal using the
Mithun	"	age (as and when		Skiii infections		solution at 15 days interval.
		required)				* For Mithun, give Ivermectin @ 200 mg per kg body weight at the
				D1 1 0	,	time of salt feeding.
				Black Quarter Haemorhagic	/	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
				Septicaemia		menuonea.
				F.M.D.		- Vaccinate against F.M.D.
				J.		
Fishery:		reeding Pond		ond and water - Bu		d breeding can be started.
Fishery: Carp culture	bre	eding	Pond	and water		
*	bre	eding	Pond	and water	- Wat	er quality in breeding pool should be clean, apply lime to maintain
<u> </u>	bre	eding	Pond	and water	- Wat	er quality in breeding pool should be clean, apply lime to maintain um p ^H with high dissolved oxygen for intensive induced breeding
*		Ü			- Wat optim progra	er quality in breeding pool should be clean, apply lime to maintain num p ^H with high dissolved oxygen for intensive induced breeding namme.
<u> </u>		eding		and water	- Wat optim progra - Pone	er quality in breeding pool should be clean, apply lime to maintain um p ^H with high dissolved oxygen for intensive induced breeding
<u> </u>		Ü			- Wat optim progra - Pond water - App	er quality in breeding pool should be clean, apply lime to maintain tum p ^H with high dissolved oxygen for intensive induced breeding amme. d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . Is a mixture of raw cow dung @5000kg/ha +75 kg urea +75kg SSP
<u> </u>		Ü	Pond		- Wat optim progra - Pond water - App in nur	er quality in breeding pool should be clean, apply lime to maintain num p ^H with high dissolved oxygen for intensive induced breeding amme. d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . It is a mixture of raw cow dung @5000kg/ha +75 kg urea + 75kg SSP resery pond water 15 days before spawn stocking.
Fishery: Carp culture		Ü			- Wat optim progra - Pond water - App in nur Well	er quality in breeding pool should be clean, apply lime to maintain num p ^H with high dissolved oxygen for intensive induced breeding amme. d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . It is a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP resery pond water 15 days before spawn stocking. balanced feeds should be provided 2-3 times a day @ 5-10% body
*		Ü	Pond		- Wat optim progra - Pond water - App in nur Well weigh	er quality in breeding pool should be clean, apply lime to maintain num p ^H with high dissolved oxygen for intensive induced breeding amme. d management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . It is a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP resery pond water 15 days before spawn stocking. balanced feeds should be provided 2-3 times a day @ 5-10% body



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"Gramin Krishi Mausam Seva"

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular
			netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3
			splits.
Paddy cum	Field		Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.
fish culture			30-40% of the field can be converted into trench/pond for fish culture.



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"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, \ 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Thoubal $(13^{th}$ to 17^{th} May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 29.0 - 31.0 °C & minimum temp. 17.0 - 20.0 °C. Relative humidity may reach upto 94 % (max RH) & 67 % (min RH). The average wind speed may be 4-6 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops	<u> </u>		
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		Drain out excess rain water if accumulated due to rain in crop field.Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 100 – 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya	Transplanting			- In fertile upland area, prepare pits of size 2x2x2 fe	eet to transplant the
				seeded or grafted seedlings from a reliable source. - Avoid water logging area, frost prone or area where	high wind speed is
				experienced.	
				- Incorporate 10-12 kg of FYM and Trichoderma @ 2 soil.	20g/ pit with the top
Turmeric	Sowing of turme	eric		- Planting of Turmeric may be done in upland area.	
				- Before planting treat seed rhizome with Sixer	@ 2g/ kg seed or
				Trichoderma harzianum @ 10g/ kg seed or Carbe	endazim @ 2g/ kg
Tree Bean	Nursory proper	Nursery preparation		seed. Maintain spacing at 25cm X 40-45cm. Collect disease free mature and good quality tree by	non node Procura
Tree Dean	Nuisery prepara	ation		items below for nursery raising:	bean pous. Frocure
				Sand, soil polybag/ pro-tray and chemicals for seed	treatment.
Cucurbits	Vegetative to			- Weeding may be done.	
	flowering and			- Provide proper staking to support plants and av	oid fruits to touch
	fruiting			soil.	C
				- Rotting of young fruits/ premature ripening of then Methyl Eugenol or Beculure may be used as p	
				fruit fly and insecticides like Cypermethrin may be	
				may also be used.	sprayea. Treem on
Animal Sciences				•	
* Wholesome/ clear	water must be pro	vided	after adding po	ium permanganate/ sanitizer for drinking water.	
Pond water must be		treatn			
Name of the animal	Growth stage		Disease/ infesta		
Poultry (Chicken/	All age groups			- Bleaching powder may be spread near farm premi	
Turkey/ Duck)				- To avoid dehydration give vit C in drinking water vitamins/ ORS during evening.	er along with other
				- Avoid caking of litter materials.	
		Coccidiosis		- Give Amprolium Powder @2g/lit of drinking wat	er for 5 to 7 days.
Sheep/ Goat	Above 3 months of	of	Black Quarter		
	age (as and when		Haemorhagic	Vaccinate against B.Q./ H.S. and FMD using prove	n vaccine of the
	required)		Septicaemia ai	diseases mentioned.	
Pig	All age groups		F.M.D. Preventive	Wholesome/ clear water must be provided after add	
rig	All age groups		measures		ing notoccium
				permanganate/ sanitizer for drinking water	ling potassium
				permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.	ling potassium
Cattle / Buffalo/	Above 3 months of		Skin infections	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the	
Cattle / Buffalo/ Mithun	age (as and when		Skin infections	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval.	ne animal using the
			Skin infections	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg both.	ne animal using the
	age (as and when			Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding.	ne animal using the
	age (as and when		Black Quarter	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine	ne animal using the
	age (as and when		Black Quarter, Haemorhagic	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding.	ne animal using the
	age (as and when		Black Quarter	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine	ne animal using the
Mithun	age (as and when		Black Quarter/ Haemorhagic Septicaemia	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned.	ne animal using the
Mithun Fishery:	age (as and when required)		Black Quarter/ Haemorhagic Septicaemia	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned.	ne animal using the
Mithun Fishery:	age (as and when required)		Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply lin	ne animal using the ody weight at the of the diseases
Mithun Fishery:	age (as and when required)		Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply lin brimum p ^H with high dissolved oxygen for intensive industrials.	ne animal using the ody weight at the of the diseases
Fishery: Carp culture brown	age (as and when required)	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply ling of timum p with high dissolved oxygen for intensive inductor or gramme.	ne animal using the ody weight at the of the diseases
Fishery: Carp culture brown	age (as and when required)	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limptimum pH with high dissolved oxygen for intensive indurogramme. Pond management should be started for stocking fish spa	ne animal using the ody weight at the of the diseases the to maintain deed breeding twns. Maintain
Fishery: Carp culture brown	age (as and when required)	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limptimum pH with high dissolved oxygen for intensive inductor management should be started for stocking fish spatater depth at 1.0-1.5m. Apply lime @ 300kg/ha to maintate.	ne animal using the ody weight at the of the diseases the to maintain deed breeding twns. Maintain ain optimum p ^H .
Fishery: Carp culture brown	age (as and when required)	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limportimum pH with high dissolved oxygen for intensive inductor management should be started for stocking fish spatater depth at 1.0-1.5m. Apply lime @ 300kg/ha to maintate Apply a mixture of raw cow dung @ 5000kg/ha +75 kg to the solution of the solution	ne animal using the ody weight at the of the diseases the to maintain deed breeding twns. Maintain ain optimum p ^H .
Fishery: Carp culture brown	age (as and when required) reeding urseries	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limbrimum p ^H with high dissolved oxygen for intensive industry in the started for stocking fish spatater depth at 1.0-1.5m. Apply lime @300kg/ha to maintate Apply a mixture of raw cow dung @ 5000kg/ha +75 kg unursery pond water 15 days before spawn stocking.	ne animal using the ody weight at the of the diseases the to maintain ced breeding twns. Maintain ain optimum pH. area + 75kg SSP
Fishery: Carp culture brown	age (as and when required) reeding urseries	Pond	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limportimum pH with high dissolved oxygen for intensive inductor management should be started for stocking fish spatater depth at 1.0-1.5m. Apply lime @ 300kg/ha to maintate Apply a mixture of raw cow dung @ 5000kg/ha +75 kg to the solution of the solution	ne animal using the ody weight at the of the diseases the to maintain ced breeding twns. Maintain ain optimum pH. area + 75kg SSP
Fishery: Carp culture brown	age (as and when required) eeding	Pond Feed Fish	Black Quarter, Haemorhagic Septicaemia F.M.D.	Pond water must be given after proper treatment. - Use Butox liq. @ 2ml/ litres of water and brush the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg bottime of salt feeding. Vaccinate against B.Q./ H.S. using proven vaccine mentioned. - Vaccinate against F.M.D. Bund breeding can be started. Water quality in breeding pool should be clean, apply limbrimum pH with high dissolved oxygen for intensive indurogramme. Pond management should be started for stocking fish spatater depth at 1.0-1.5m. Apply lime @300kg/ha to mainta Apply a mixture of raw cow dung @ 5000kg/ha +75 kg unursery pond water 15 days before spawn stocking. Vell balanced feeds should be provided 2-3 times a day @	ne animal using the ody weight at the of the diseases the to maintain deed breeding twins. Maintain thin optimum pH. airea + 75kg SSP



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"Gramin Krishi Mausam Seva"

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	1	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.



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



"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Ukhrul $(13^{th}$ to 17^{th} May, 2015)

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 26.0 - 29.0 °C & minimum temp. 14.0 - 18.0 °C. Relative humidity may reach upto 84 % (max RH) & 48 % (min RH). The average wind speed may be 3-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		 Drain out excess rain water if accumulated due to rain in crop field. Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 - 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops			· · · · · · · · · · · · · · · · · · ·
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Turmeric	Sowing	of turmeric		- Planting of Turmeric may be done in upland area. - Before planting treat seed rhizome with Sixer @ 2g/ kg seed of Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg seed Meintein gracing at 25cm V 40 45cm
Tree Bean	Nursery	preparation		seed. Maintain spacing at 25cm X 40-45cm. Collect disease free mature and good quality tree bean pods. Procuritiems below for nursery raising: Sand, soil polybag/ pro-tray and chemicals for seed treatment.
Cucurbits	Vegetat flowerin fruiting	ng and		 - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touc soil. - Rotting of young fruits/ premature ripening of fruits if observe then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem of may also be used.
Animal Science * Wholesome/ cond water mus	lear water mus			otassium permanganate/ sanitizer for drinking water.
Name of the anima			Disease/ infest	station Agro-meteorological advisories
Poultry (Chick Turkey/ Duck)				 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 Above 3 months age (as and when required)		nd when	Coccidiosis Black Quarter Haemorhagic Septicaemia a F.M.D.	Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the
Pig	All age g	All age groups		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo Mithun	Above 3 age (as a required)		Skin infection	
			Black Quarter Haemorhagic Septicaemia F.M.D.	Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
Figh own:			1'.IVI.D.	- Vaccinate against F.M.D.
Fishery: Carp culture	breeding	·		 Bund breeding can be started. Water quality in breeding pool should be clean, apply lime to maintain optimum p^H with high dissolved oxygen for intensive induced breeding programme.
	nurseries			 Pond management should be started for stocking fish spawns. Maintain water depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p^H. Apply a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP in nursery pond water 15 days before spawn stocking.
		Feed Fish		Well balanced feeds should be provided 2-3 times a day @ 5-10% body weight/day 20-30 million spawn can be stocked in 1 ha pond.
	Grow -out		and water	Regular manuring with a slurry of RCD @1500kg/ha at interval of 30 days should be done. 8000-10,000 fingerlings can be stocked per ha.
				Sampling of fish for growth, diseases (if any) should be done by regular netting.
	1	Feed		Well balanced feed should be provided @ 3-5% body weight per day in 2-3

splits.



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Paddy cum	Field	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made.	
fish culture		30-40% of the field can be converted into trench/pond for fish culture.	
		-	



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



"Gramin Krishi Mausam Seva"

MANIPUR BULLETIN 12th May, 2015

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 13th to 17th May, 2015 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(8^{th} \ to \ 11^{th} \ May, \ 2015)$

During last four days sky was mainly clear to partly cloudy. **No** rainfall was recorded during last four days. Maximum temperature range observed was 23.8-30.6 °C, range of minimum temperature observed was 14.5-19.4 °C, mean relative humidity observed in morning and afternoon were 86.5 % and 64.75 % respectively. The average wind speed range was 1.1-3.5 km/hr.

Weather forecast for next five days of Bishnupur $(13^{th} to 17^{th} May, 2015)$

There may be light to moderate rain upto Sunday. Sky will be partly cloudy to mainly cloudy with maximum temp. of 28.0 - 31.0 °C & minimum temp. 17.0 - 21.0 °C. Relative humidity may reach upto 95 % (max RH) & 64 % (min RH). The average wind speed may be 2-4 km/ hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Milky dough stage		- Maintain optimum water level in the crop field.
Kharif Rice	Land preparation for nursery		 For main kharif the soil may be opened with tillers or disc ploughs. Prepare nursery bed of 700 m² area, apply well decomposed FYM/compost @ 1 t/ 700 m² at final leveling. Seed rate is 60-65kg for a hectare. Broadcast seeds in the upland. Soak and incubate the well filled disease free seeds before sowing. Treat seeds with Nativo@2g/kg seed.
Rabi Maize	Cob maturity		Drain out excess rain water if accumulated due to rain in crop field.Land ploughing for kharif maize may be started.
Soybean	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Sow seed @ 40-45 kg/ha or 10-11.3 kg of seed /sangam and the recommended variety is J.S.335. Sowing may be done at spacing of 45cm x 30cm. Treat seeds with Nativo@2g/kg seeds or with Bavistin@2.5g/kg seed or with Thiram.
Groundnut	Sowing to early vegetative		 - Plot must be kept weed free to avoid insect/ pest. - Seed rate is 100 - 110 kg/ha and the recommended varieties are ICGS-75 & JL-24. Sow seeds at spacing 30cm x 15cm. - Treat seeds with Imidacloprid @ 2ml/ litre water or Bavistin @ 2.5g/ kg seed or with Thiram.
Blackgram	Sowing to early vegetative		 Plot must be kept weed free to avoid insect/ pest. Seed rate is 10-15 kg seeds/ ha. Sowing may be done by broadcasting or dibbling.
Rice bean	Vegetative		Interculture operation may be done to reduce weed population to avoid insect/ pest.
Storage (seed)			- Dry, clean and store the seeds in RC-seed bins after proper drying of seeds and charcoal. Check for moisture content or weight of seeds. After proper drying, store grains/ seeds in well ventilated godowns.
Horticulture Crops	· ·		
Lime/ Lemon	Transplanting		 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area. Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top soil.



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Papaya		Transplanting				 In fertile upland area, prepare pits of size 2x2x2 feet to transplant the seeded or grafted seedlings from a reliable source. Avoid water logging area, frost prone or area where high wind speed is
						experienced Incorporate 10-12 kg of FYM and Trichoderma @ 20g/ pit with the top
Turmeric		Sowing of turmeric			 soil. Planting of Turmeric may be done in upland area. Before planting treat seed rhizome with Sixer @ 2g/ kg seed or Trichoderma harzianum @ 10g/ kg seed or Carbendazim @ 2g/ kg 	
Tree Bean		Nursery preparation				seed. Maintain spacing at 25cm X 40-45cm. Collect disease free mature and good quality tree bean pods. Procure items below for nursery raising:
Cucurbits Vegetative to flowering and fruiting					Sand, soil polybag/ pro-tray and chemicals for seed treatment. - Weeding may be done. - Provide proper staking to support plants and avoid fruits to touch soil. - Rotting of young fruits/ premature ripening of fruits if observed then Methyl Eugenol or Beculure may be used as pheromone trap for fruit fly and insecticides like Cypermethrin may be sprayed. Neem oil may also be used.	
	lear w				tassium	permanganate/ sanitizer for drinking water.
Pond water mus. Name of the animal		Growth stage	i ireali	Disease/ infest	ation	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)		All age groups		Discusso micso		 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.
				Coccidiosis		- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
Sheep/ Goat		Above 3 months of age (as and when required)		Black Quarter/ Haemorhagic Septicaemia and F.M.D.		Vaccinate against B.Q./ H.S. and FMD using proven vaccine of the diseases mentioned.
Pig		All age groups		Preventive measures		Wholesome/ clear water must be provided after adding potassium permanganate/ sanitizer for drinking water. Pond water must be given after proper treatment.
Cattle / Buffalo/ Mithun		Above 3 months of age (as and when required)		Skin infections		- Use Butox liq. @ 2ml/ litres of water and brush the animal using the solution at 15 days interval. * For Mithun, give Ivermectin @ 200 mg per kg body weight at the time of salt feeding.
				Black Quarter/ Haemorhagic Septicaemia F.M.D.		Vaccinate against B.Q./ H.S. using proven vaccine of the diseases mentioned.
T:1.				11.111.10.		- Vaccinate against F.M.D.
Fishery: Carp culture	bre	Ü		- Wate optim progra		I breeding can be started. er quality in breeding pool should be clean, apply lime to maintain
						um p ^H with high dissolved oxygen for intensive induced breeding mme.
	nur	nurseries Pon		water - App		I management should be started for stocking fish spawns. Maintain depth at 1.0-1.5m. Apply lime @300kg/ha to maintain optimum p ^H . ly a mixture of raw cow dung @ 5000kg/ha +75 kg urea + 75kg SSP sery pond water 15 days before spawn stocking.
		Fish		weig		palanced feeds should be provided 2-3 times a day @ 5-10% body t/day million spawn can be stocked in 1 ha pond.
	Gro	Grow -out		Pond and water		ar manuring with a slurry of RCD @1500kg/ha at interval of 30 days



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"Gramin Krishi Mausam Seva"

			should be done.
		Fish	8000-10,000 fingerlings can be stocked per ha.
			Sampling of fish for growth, diseases (if any) should be done by regular netting.
		Feed	Well balanced feed should be provided @ 3-5% body weight per day in 2-3 splits.
Paddy cum fish culture	Field	, I	Trenches/channels in rice field with a depth of 1.0 - 1.5m should be made. 30-40% of the field can be converted into trench/pond for fish culture.