

Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 21st June, 2016

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to 30.9 $^{\circ}$ C, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

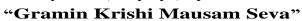
Weather forecast for next five days of Tamenglong

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 28 to 30 ° C & minimum temp. 18.0 to 19.0 ° C. Relative humidity may reach upto 98 % (max RH) & 55 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South Westerly to South West Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Fish nurseries	Fish nurseries Pond and water Feed Fish Grow out Pond and water Feed Feed

E-mail: agromet_mnp@yahoo.co.uk



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



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Thoubal

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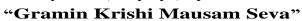
Weather forecast for next five days of Thoubal

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 28 to 30 ° C & minimum temp. 18.0 to 19.0 ° C. Relative humidity may reach upto 97 % (max RH) & 56 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be North West Westerly to North Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

	Rain	nfall at many place	es likely over northeastern states
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	•	•	
Early kharif rice	Grain filling-		Maintain water level at 5-8 cm. Drain/pump out excess water from the
	Maturity		crop field due to rain
			Check for any insect-pest in the crop.
Main kharif rice	Land preparation		➤ Prepare 700m² of land for transplanting one hectare area. Soak seed
	for sowing		overnight and incubate for 1 day.
			Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time
		_	of final leveling.
		■ Thrips	Apply lambda cyhalothrin @ 15 ml/15ltr of water.
		(c.n. Ingellai	
		chubi)	
	Nursery for		> Puddle the field and apply 1 kg <i>Furadan 3G</i> , 7 days before uprooting in
	transplanting		the nursery bed.
			Uproot the seedling of about 14-21 days old.
			Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to
			plant spacing should be given for line transplanting.
			> Seedling of Main season rice can be raised upto first week of July and
			can be transplanted within 3 rd week of July (for late transplanting).
Groundnut	Seedling stage		Thin out plants at spacing of 30 cm x 15 cm and weed out.
			Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to		➤ Seed rate of 10-15 kg/ hectare may be sown by broadcasting or
	seedling		dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha.
			Drain out the field
Ginger/ Turmeric	Vegetative		Weeding and interculture operation may be done and apply 100 Kg
			Urea and 300 Kg SSP at 2-3 months.
			Avoid water logging in and around the crop field.
Soybean	Sowing		Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and
			recommended variety is J.S.335 at seed spacing of 30x15 sq cm.
			> If not sown early, sowing must be done before 1st fortnight of July
			Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops		T	
Cucurbits (Water-	Vegetative/harvest		Four leaf stage, young plants may be transplanted after rain
melon, pumpkin, bitter gourd, etc.)			Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		 Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the
			earliest.
Banana (Grand naine)	Transplanting		For upland areas this is the right time for transplanting of banana.
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Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
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Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
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Ukhrul

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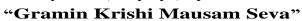
Weather forecast for next five days of Ukhrul

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Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	_		
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		> For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

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Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
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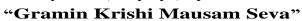
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Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Fish nurseries	Fish nurseries Pond and water Feed Fish Grow out Pond and water Feed Feed

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Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 21st June, 2016

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 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to $30.9\,^{\circ}\text{C}$, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}\text{C}$, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

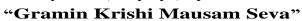
Weather forecast for next five days of Chandel

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 28 to 30 ° C & minimum temp. 18.0 to 19.0 ° C. Relative humidity may reach upto 97 % (max RH) & 63 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South Westerly to Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	I		L
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops	1		
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Fish nurseries	Fish nurseries Pond and water Feed Fish Grow out Pond and water Feed Feed

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Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



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"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 21st June, 2016

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 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to 30.9 $^{\circ}$ C, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

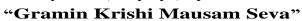
Weather forecast for next five days of Churachandpur

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 28 to 30 ° C & minimum temp. 20.0 to 21.0 ° C. Relative humidity may reach upto 99 % (max RH) & 60 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be Southerly to South-Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	_		
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		> For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Fish nurseries	Fish nurseries Pond and water Feed Fish Grow out Pond and water Feed

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ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 21st June, 2016

Imphal East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to 30.9 $^{\circ}$ C, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

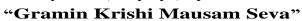
Weather forecast for next five days of Imphal East

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 29 to 31 ° C & minimum temp. 18.0 to 19.0 ° C. Relative humidity may reach upto 98 % (max RH) & 49 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be North West Westerly to North-Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	_		
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops			
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		> For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	Deworm orally once using Nilzan-F @ 90ml/ 300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:			<u> </u>
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Stage	Management	Agro-metrological advisories
Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
	Feed	Fish feed should be provided @ 10-15 % body weight per day.
	Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
	Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Fish nurseries	Fish nurseries Pond and water Feed Fish Grow out Pond and water Feed

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ICAR Research Complex for N.E.H. Region

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Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



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MANIPUR BULLETIN 21st June, 2016

Imphal West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to 30.9 $^{\circ}$ C, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

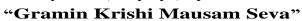
Weather forecast for next five days of Imphal West

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy, with maximum temp. 29 to 31 ° C & minimum temp. 18.0 to 19.0 ° C. Relative humidity may reach upto 98 % (max RH) & 51 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South West Westerly to North West Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	I		L
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops	1		
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
Cow pea	Harvesting		As keeping quality is poor green ones should be harvested at the earliest.
Banana (Grand naine)	Transplanting		For upland areas this is the right time for transplanting of banana.







Turmeric	Intercrop	Turmeric/ginger may also be intercrop with other vegetables like French bean in the early stage of crop.
Cucumber	Transplanting	> Transplanting to be followed after rain.
Water mimosa (Neptunia Oleracea)	Planting and First harvest	 Maintain water at a depth of 2.5-3 ft. Use new slips having atleast 4-5 nodes for planting Maintain spacing of 3mX3m, plant 3 slips/hill-slips may be tied with a polythene rope or pegging may be done with small poles. Harvesting may be done after 2-2.5 month depending upon the growth and weather at 10-15 days interval. Seed rate: 840 steps/sangam

Name of the	Growth stage	Disease/ infestation	Agro-meteorological advisories
animal Poultry (Chicken/ Turkey/ Duck)	All age groups	Care & management Coccidiosis	 Provide only clean/wholesome drinking water only Do not give mud water as there is chance of colibacillosis during the rainy season Use water sanitizer in drinking water/potassium per magnate (few grains) Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.
Sheep/ Goat	All age groups excepts the young ones	Care & management Dewormig	 Keep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture problem Give multivitamins @15ml orally Deworming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or ivermectin @50mg/kg b. wl.
Pig	All age groups except the young ones	Care and management Mites infestation Enteric disease	 Mineral mixture be added in feed @10-20g/adult animal Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days.
Cattle	All age groups excepts the young ones	B.Q./ H.S/FMD	> If the animals have not yet been vaccinated, give vaccine, now for Black Quarter, Haemorrhagic septicaemia, Foot & mouth Disease.
		Endoparasites	➤ Deworm orally once using Nilzan-F @ 90ml/300 kg body weight.
		Care & management	 Mix enough quantity salts in feed and water If the animals do not have access to green fodders, vitamin A injection/supplements should be given. Food supplements may be given @20-30 gm/animals. Prepare fields for transplantation of fodders, grasses, especially in the available foot hills/fallow lands. Care should be taken to protect yoke gall/bursitis.
Fishery:	I		
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	Water depth should be maintain at 1.0-1.5m

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	> Sampling of fish for growth, disease (if any) should be done by regular netting.
		Fish	 Partial harvesting of marketable size fishes are also recommended Feed should be provided @ 3-5 % body weight per day
			Feed can be fed at 2 times a day.

E-mail: agromet_mnp@yahoo.co.uk



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004





Paddy cum fish	water	A	Water depth of the field can be increase by pumping or draining if water is
culture			available to continue the culture.
		>	20-40% of the paddy plot can be made as 1.0-1.5m depth trenches
		>	1000-3000 fish fingerlings can be stocked in 1 hectare rice field.



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MANIPUR BULLETIN 21st June, 2016

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22nd to 26th June, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West $(17^{th}$ to 20^{th} June, 2016)

The sky remained mainly cloudy to overcast. Rainfall of 29.3 mm was recorded during past four days. Maximum temperature range observed was 29.4 to 30.9 $^{\circ}$ C, range of minimum temperature observed was 21.0 to 22.2 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 91.25 % and 81 % respectively. The average wind speed range was 4.1 to 7.1 km/hr.

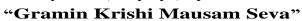
Weather forecast for next five days of Senapati

(22nd to 26th June, 2016)Likely to have light rain upto Sunday. Sky will remain mainly cloudy to overcast, with maximum temp. 28 to 30 $^{\circ}$ C & minimum temp. 18.0 to 19.0 $^{\circ}$ C. Relative humidity may reach upto 98 % (max RH) & 48 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be South Westerly to Westerly during the next five days.

Weather outlook for subsequence 2 days from 26th to 28th June, 2016

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	•	•	
Early kharif rice	Grain filling- Maturity		 Maintain water level at 5-8 cm. Drain/pump out excess water from the crop field due to rain Check for any insect-pest in the crop.
Main kharif rice	Land preparation for sowing	■ Thrips (c.n. Ingellai chubi)	 Prepare 700m² of land for transplanting one hectare area. Soak seed overnight and incubate for 1 day. Apply 65 Kg Urea, 250 Kg SSP and 45 Kg MOP per hectare at the time of final leveling. Apply lambda cyhalothrin @ 15 ml/15ltr of water.
	Nursery for transplanting		 Puddle the field and apply 1 kg <i>Furadan 3G</i>, 7 days before uprooting in the nursery bed. Uproot the seedling of about 14-21 days old. Maximum of 2-3 seedling/hill; 20-25 cm row to row & 10 cm plant to plant spacing should be given for line transplanting. Seedling of Main season rice can be raised upto first week of July and can be transplanted within 3rd week of July (for late transplanting).
Groundnut	Seedling stage		 Thin out plants at spacing of 30 cm x 15 cm and weed out. Maintain proper drainage system to avoid water logging.
Blackgram	Sowing to seedling		 Seed rate of 10-15 kg/ hectare may be sown by broadcasting or dibbling after rains. Treat the seed with Thiram or Captan @3 kg/ha. Drain out the field
Ginger/ Turmeric	Vegetative		 Weeding and interculture operation may be done and apply 100 Kg Urea and 300 Kg SSP at 2-3 months. Avoid water logging in and around the crop field.
Soybean	Sowing		 Sow seed @ 40-45 Kg/ha or 10-11.3 kg of seed/sangam and recommended variety is J.S.335 at seed spacing of 30x15 sq cm. If not sown early, sowing must be done before 1st fortnight of July Hand weeding should be done before 30-35 days, after sowing.
Horticulture Crops	•	•	
Cucurbits (Water- melon, pumpkin, bitter gourd, etc.)	Vegetative/harvest		 Four leaf stage, young plants may be transplanted after rain Avoid water stagnation in the root zone, harvest the mature ones.
Chilli	Seed Collection		> Seed collection should be done preferably on bright sunshine hours.
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