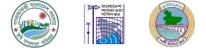


# NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

## 08 FEBRUARY 2023 (THURSDAY) [FOR THE PERIOD 08.02.2023 – 12.02.2023]





#### DISCLAIMER

Under the Agro-meteorological Information System Development Project, Agromet Advisory Service Bulletins at National & Sixty Four (64) districts have been prepared on experimental basis. These bulletins are being displayed through the website of Department of Agricultural Extension for valuable comments/ suggestions from all concerned.

#### ISSUED BY

Agro-Meteorological Information Systems Development Project Department of Agricultural Extension (DAE) Ministry of Agriculture In collaboration with Bangladesh Meteorological Department

## **Realized Weather at different locations in the country**

# Rainfall for last 24 hours (till 06 AM on 08 February 2023) and maximum temperature on 07 February and minimum temperature on 08 February 2023 is given below:

Name of	Name of	Rain	Max.	Min.	Name of	Name of	Rain	Max.	Min.
Divisions	Stations	fall	Temp	Temp	Divisions	Stations	fall	Temp	Temp
		(mm)	(°C)	(°C)			(mm)	(°C)	(°C)
Dhaka	Dhaka	00	28.3	18.3	Chattogram	Chattogram	00	28.0	18.0
	Tangail	00	28.6	16.2		Sandwip	00	27.8	18.4
	Faridpur	00	29.0	17.8		Sitakunda	00	29.5	14.0
	Madaripur	00	26.3	13.3		Rangamati	00	29.5	17.0
	Gopalgonj	00	27.3	15.5		Cumilla	00	27.2	18.9
	Nikli	00	26.5	13.0		Chandpur	00	27.7	18.5
						M.Court	00	28.5	16.8
Rajshahi	Rajshahi	00	29.2	13.3		Feni	00	28.8	16.5
	Ishurdi	00	28.5	14.4		Hatiya	00	27.5	XX
	Bogura	00	28.2	16.6		Cox's Bazar	00	30.0	17.5
	Badalgachhi	00	27.6	14.2		Kutubdia	00	28.0	XX
	Tarash	00	27.2	15.0		Teknaf	00	30.4	16.0
Rangpur	Rangpur	00	27.3	15.6	Khulna	Khulna	00	29.2	18.5
	Dinajpur	00	27.0	13.9		Mongla	00	31.4	20.0
	Sayedpur	00	27.6	14.6		Satkhira	00	29.1	19.5
	Tetulia	00	25.0	11.4		Jashore	00	30.4	17.4
	Dimla	00	25.6	14.0		Chuadanga	00	30.0	14.0
	Rajarhat	00	26.5	13.2		Kumarkhali	00	29.8	16.6
Mymensingh	Mymensingh	00	25.8	16.0	Barishal	Barishal	00	29.7	18.0
	Netrokona	00	25.5	16.6		Patuakhali	00	30.0	17.2
						Khepupara	00	29.2	17.2
Sylhet	Sylhet	00	25.8	16.0		Bhola	00	30.2	17.6
	Srimangal	00	28.8	14.7					

#### **Highlights:**

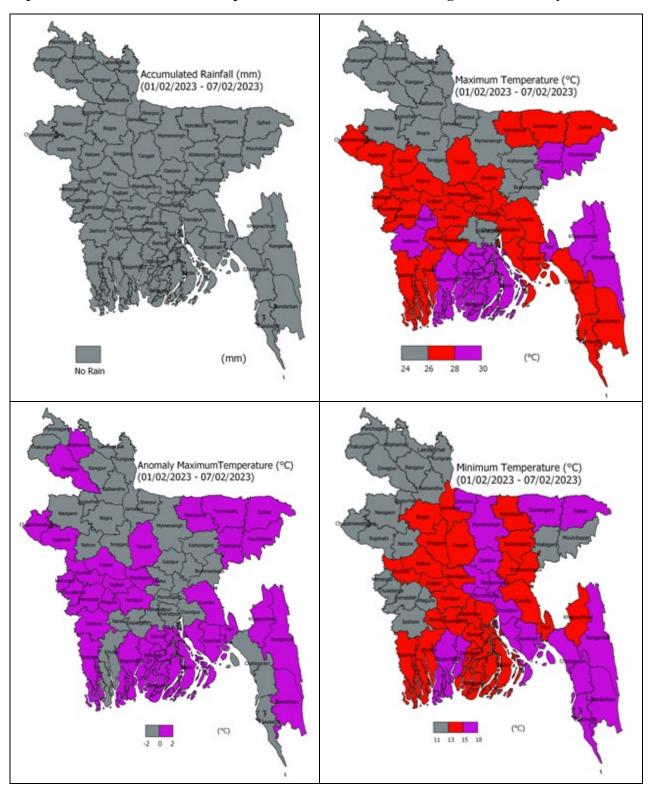
- Country average bright sunshine hour was 6.50 hours per day during last week.
- Country average free water loss during the previous week was 3.00 mm per day.

#### Weather Forecast Valid for 24 Hours commencing 06 PM Today:

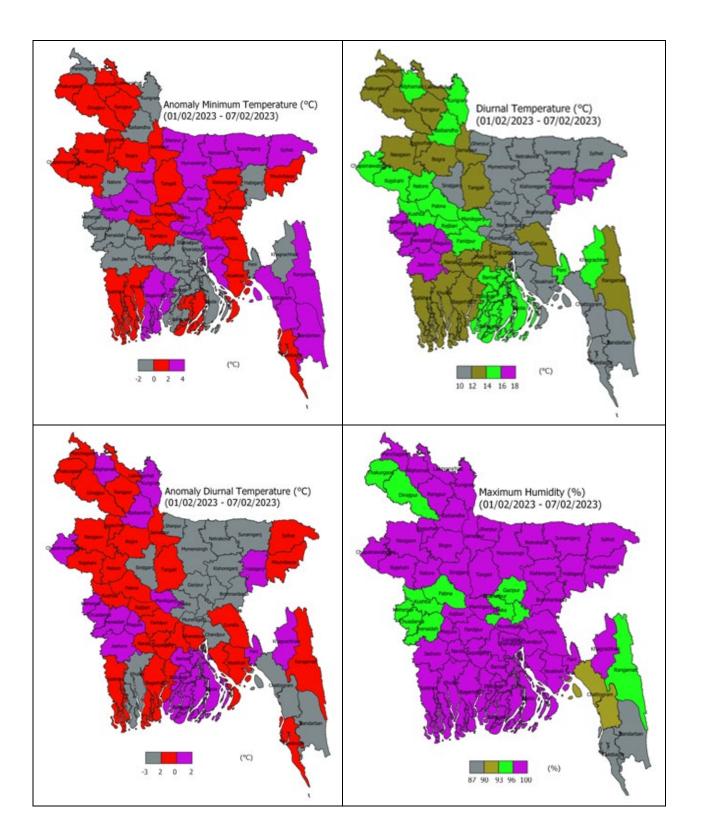
**Forecast**: Weather may remain mainly dry with partly cloudy sky over the country, having chances of light rain/drizzle at one or two places over Rangpur, Mymensingh and Sylhet divisions.

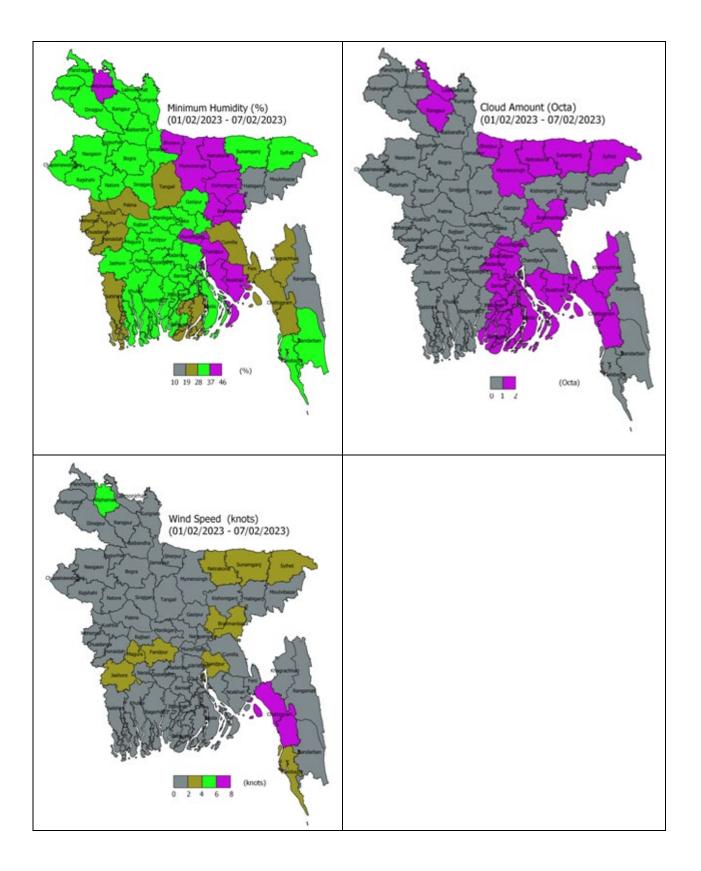
**Fog**: Moderate to thick fog may occur at places over the river basins & southern part and light to moderate fog may occur at places elsewhere over the country during midnight till morning.

Temperature: Night and day temperature may remain nearly unchanged over the country.



## Spatial Distribution of weather parameters for the Week ending on 07 February 2023

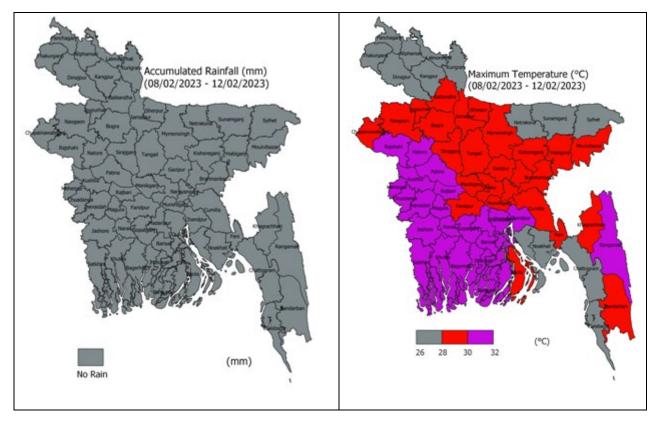




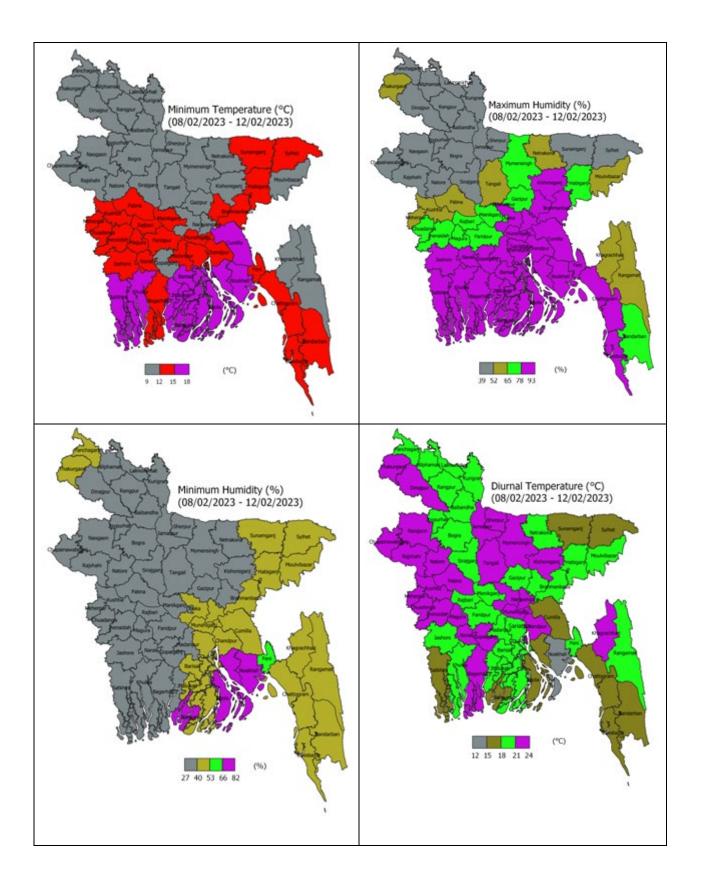
## Weather Forecast and Advisory for the Period of 08.02.2023 to 14.02.2023

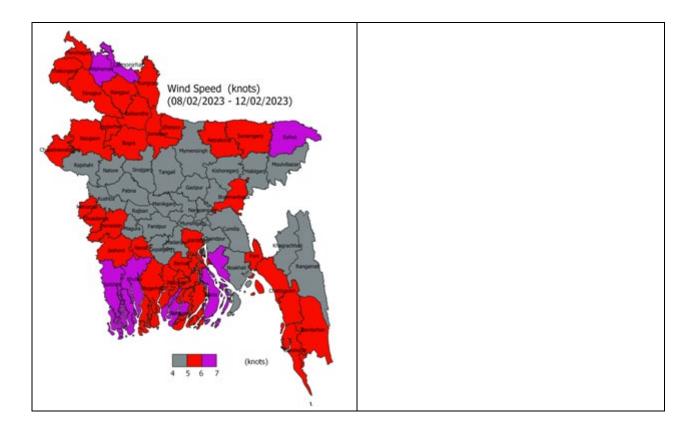
Bright sunshine hour is likely to be from 5.50 to 7.50 hours per day during this week. Average free water loss is likely to be from 2.00 to 4.00 mm per day during this week.

- Weather may remain mainly dry with temporary partly cloudy sky over the country during this period.
- Light to moderate fog may occur at places over the country during late night to morning of this period.
- Day & night temperature may remain nearly unchanged over the country during this period.

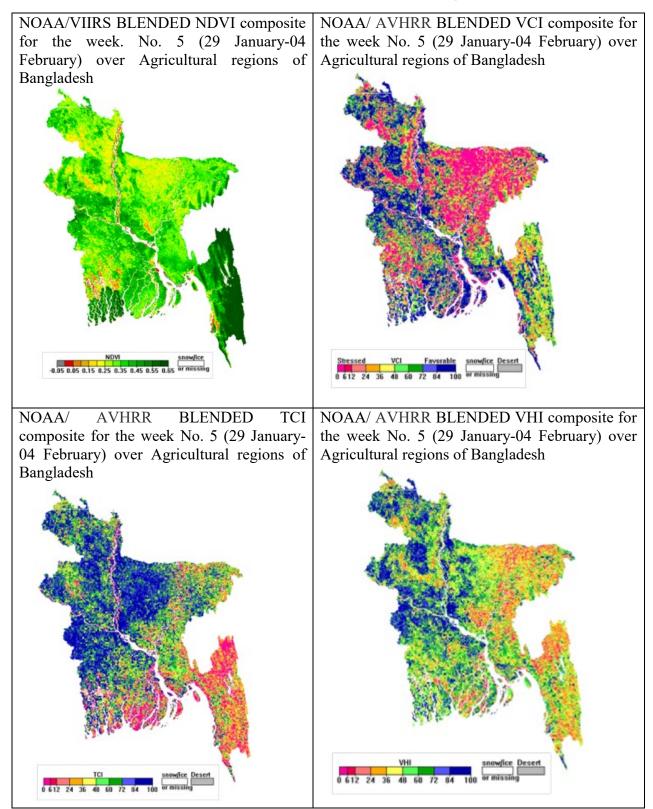


## District Wise Quantitative Weather Forecast for next Five days from 08 Feb.- 12 Feb. 2023





## **Different Satellite Products over Bangladesh**



## **Agromet Advisories**

According to the medium range forecast, there is no chance of rainfall of the country in the next five days. The following agromet advisories are provided in these circumstances:

#### Rajshahi Region (Districts: Rajshahi, Chapainawabganj, Naogaon and Natore)

#### Wheat

- **Stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.

- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

• Keep the poultry shed clean and dry.

- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Rangpur Region (Districts: Rangpur, Kurigram, Gaibandha, Nilphamari, Lalmonirhat)

## **Rice Boro**

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

• Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.

- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
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- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

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- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Protect the chicken from the cold air with plastic bags or plastic screens on all sides.
- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.
- High wattage bulbs (100 watts or more) in the hen house for 1-2 hours after dusk will increase egg production and reduce disease.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Dinajpur Region (Districts: Dinajpur, Thakurgaon and Panchaghar)

## Wheat

- **Stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

• Stage: Tillering

- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Protect the chicken from the cold air with plastic bags or plastic screens on all sides.
- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.
- High wattage bulbs (100 watts or more) in the hen house for 1-2 hours after dusk will increase egg production and reduce disease.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Bogura Region (Districts: Bogura, Joypurhat, Pabna, Sirajganj)

#### Wheat

- Stage: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- **Stage**: Transplanting
- The main field should be prepared for transplanting of boro paddy with 3-4 times ploughing followed by laddering and Leveling should be done properly to retain water uniformity.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and also 13 kg TSP, 20 kg MOP, 15kg gypsum and 15 kg zinc per bigha after complete preparation of field.
- The basal fertilizer dose may vary location to location based on land type and soil texture.
- In char area, 2/3 MoP(14.0 kg/bigha) to be applied with basal dose and rest 1/3 MoP with last top dress of urea.
- Seedlings of 35 to 45 days old are to be transplanted.
- Maintain a distance of 20-25cm line to line & 15-20cm plant to plant.
- Place at least one branched bamboo twig at each 2-2.5 decimal land as piercing.
- Dead hills are to be replanted within 7-10 days of transplanting.
- Maintain thin a layer of water (1 2 cm) in the main field up to 15 days after transplanting.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Sylhet Region (Districts: Sylhet, Moulvibazar, Sunamganj, Habiganj)

#### Wheat

- **Stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- **stage**: Grain Formation
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Remove water from land before pesticide application.
- At this stage of crop and climatic conditions, there is a chance of Rice bug incidences. For Rice bug control spray Carbaryl (85WP) @2g/liter or Chlorpyrephos (20EC) @ 2.0 ml/litre of water. Avoid excess irrigation in the field, in absence of rain otherwise the basal part of the plant will be rotten.
- If any infestation/attack /symptoms of Brown Plant Hoppers (BPH) insects are found, then should go for spray with insecticide like Isoprocarb @ 2.5g or Imidacloprid @ 2.0 ml. per litre water only in clear weather and when there is no forecasting of rains.
- There is a chance of attack of leaf roller Spray Malathion or Chlorpyriphos @2ml/liter of water.
- Maintain 2-5 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.

• Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Rangamati Region (Districts: Rangamati, Khagrachari and Bandarban)

## **Rice Boro**

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.

- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Barishal Region (Districts: Jhalakati, Patuakhali, Pirujpur, Barguna, Barishal, Bhola)

## Wheat

- **stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

#### Jashore Region (Districts: Jashore, Kushtia, Chuadanga, Jhenaidah, Meherpur, Magura)

#### Wheat

- **stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- **Stage**: Transplanting
- The main field should be prepared for transplanting of boro paddy with 3-4 times ploughing followed by laddering and Leveling should be done properly to retain water uniformity.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and also 13 kg TSP, 20 kg MOP, 15kg gypsum and 15 kg zinc per bigha after complete preparation of field.
- The basal fertilizer dose may vary location to location based on land type and soil texture.
- In char area, 2/3 MoP(14.0 kg/bigha) to be applied with basal dose and rest 1/3 MoP with last top dress of urea.
- Seedlings of 35 to 45 days old are to be transplanted.
- Maintain a distance of 20-25cm line to line & 15-20cm plant to plant.
- Place at least one branched bamboo twig at each 2-2.5 decimal land as piercing.
- Dead hills are to be replanted within 7-10 days of transplanting.
- Maintain thin a layer of water (1 2 cm) in the main field up to 15 days after transplanting.
- Maintain 1-2 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.

- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Faridpur Region (Districts: Faridpur, Rajbari, Madaripur, Shariatpur and Gopalganj)

#### **Rice Boro**

- **stage**: Grain Formation
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Remove water from land before pesticide application.
- At this stage of crop and climatic conditions, there is a chance of Rice bug incidences. For Rice bug control spray Carbaryl (85WP) @2g/liter or Chlorpyrephos (20EC) @ 2.0 ml/litre of water. Avoid excess irrigation in the field, in absence of rain otherwise the basal part of the plant will be rotten.
- If any infestation/attack /symptoms of Brown Plant Hoppers (BPH) insects are found, then should go for spray with insecticide like Isoprocarb @ 2.5g or Imidacloprid @ 2.0 ml. per litre water only in clear weather and when there is no forecasting of rains.
- There is a chance of attack of leaf roller Spray Malathion or Chlorpyriphos @2ml/liter of water.
- Maintain 2-5 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45

(Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.

- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Dhaka Region (Districts: Dhaka, Tangail, Gazipur, Narsingdi, Narayanganj, Munshiganj, Manikgonj)

## **Rice Boro**

- Stage: Flowering
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- There is chance of attack of insect/pests like, Rice stemborer, Rice hispa,Rice Earcutting caterpillar, Rice bug, etc. Constant monitoring is required for its level of incidences. Spray Carbaryl (85 WP) @2g/liter of water or Chlorpyrephos (20EC) @ 2.0 ml/litre of water.
- There is a chance of attack of Brown planthopper at this stage. If noticed apply insecticide like Isoprocarb @ 2.5g or Imidacloprid @ 2.0 ml. per litre water.
- Keep the field and irrigation channel weed free.
- Maintain 2-5 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Chattogram region (Districts: Chattogram, Lakshmipur, Coxsbazar, Noakhali and Feni)

**Rice Boro** 

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

## Fishery

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Cumilla Region (Districts: Cumilla, Chandpur, Bramanbaria)

## Wheat

- Stage: Vegetative Growth
- Do thinning operations if the plants have been sown in dense condition.
- Farmers are advised to apply 2nd time irrigation at wheat field at 55-60 DAS (panicle initiation stage) for good yield.
- If symptoms of sulphur deficiency noticed in wheat crop, broadcast 1.0Kg gypsum/decimal is advised.
- If rats are noticed, arrange net to catch the same or apply 2% Zinc phosphide or Lanirat (3-5g/hole) to control the attack of rats.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- **stage**: Grain Formation
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Remove water from land before pesticide application.
- At this stage of crop and climatic conditions, there is a chance of Rice bug incidences. For Rice bug control spray Carbaryl (85WP) @2g/liter or Chlorpyrephos (20EC) @ 2.0 ml/litre of water. Avoid excess irrigation in the field, in absence of rain otherwise the basal part of the plant will be rotten.
- If any infestation/attack /symptoms of Brown Plant Hoppers (BPH) insects are found, then should go for spray with insecticide like Isoprocarb @ 2.5g or Imidacloprid @ 2.0 ml. per litre water only in clear weather and when there is no forecasting of rains.
- There is a chance of attack of leaf roller Spray Malathion or Chlorpyriphos @2ml/liter of water.
- Maintain 2-5 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.

- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Khulna Region (Districts: Khulna, Satkhira, Bagerhat and Narail)

#### Wheat

- **stage**: Grain Formation
- Special monitoring of blast disease is required as there is chance of the disease due to likely incidence of fog during late night till morning. If noticed, apply Nativo 75 WG 6 gm/decimal to control the disease.
- During the stage, farmers are advised to 3rd time irrigation at wheat field for good yield.
- At this stage of crop and prevailing weather conditions, monitoring of termite infestation is advised in late sown wheat crop. If termite infestation is observed in the crop field, apply Chlorpyriphos 20EC @ 4.0 ml/litre in the soil at evening hours.
- Apply irrigation.

## **Rice Boro**

- Stage: Transplanting
- The main field should be prepared for transplanting of boro paddy with 3-4 times ploughing followed by laddering and Leveling should be done properly to retain water uniformity.
- Apply 13 kg urea (1/3 of total urea) as first basal dose and also 13 kg TSP, 20 kg MOP, 15kg gypsum and 15 kg zinc per bigha after complete preparation of field.
- The basal fertilizer dose may vary location to location based on land type and soil texture.
- In char area, 2/3 MoP(14.0 kg/bigha) to be applied with basal dose and rest 1/3 MoP with last top dress of urea.
- Seedlings of 35 to 45 days old are to be transplanted.
- Maintain a distance of 20-25cm line to line & 15-20cm plant to plant.
- Place at least one branched bamboo twig at each 2-2.5 decimal land as piercing.
- Dead hills are to be replanted within 7-10 days of transplanting.
- Maintain thin a layer of water (1 2 cm) in the main field up to 15 days after transplanting.
- Maintain 1-2 cm land water level.
- Apply irrigation.

## Vegetable

• Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.

- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.
- Let the hens out of the coop a little late in the morning and close the coop door in the evening.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.

## Mymensingh Region (Districts: Mymensingh, Kishoregonj, Jamalpur, Netrokona, Sherpur)

## **Rice Boro**

- Stage: Tillering
- Keep the field and irrigation channel weed free. Weeding should be done before application of fertilizer and mixed the fertilizer with soil. Hand weeding or weedicides (viz. Rifit 500EC, Superhit 500 EC. etc. @ 134 ml/bigha) may be used for weed control.
- Apply urea 13 kg/bigha as first top dressing after 15-20 days of transplanting (4-5 tillers/hill).
- There is a chance of attack of insect/pests like, Rice stemborer, Rice hispa, etc. Constant monitoring is required for its level of incidences.
- If noticed, collect the adults using hand net & destroy them by burying under soil or by burning.
- To captivate & control the butterflies, place 2 Pheromone Traps/bigha. Also apply Carbofuran 5g @10kg / ha. or Diazinon 10g @17kg/ha. for its control.
- There is chance of Blast and brown spot attack due to light fog and raised temperature. Apply Trooper 6.0g or Nativo 6.0g/litre water twice in 10-15 days.
- Maintain 5-7 cm land water level.
- Apply irrigation.

## Vegetable

- Due to winter season, there is a chance of powdery mildew in vegetables. To control the disease spraying with Hexaconazol/Tebuconazol @ 1.0ml/litre of water is advised.
- Prevailing weather conditions are favorable for thrips & aphids in chilli. Spray Malathion 57EC @ 1.0ml/litre or Emamectin benzoate 5% SG @ 0.5g/litre or Dimethoate 40 EC @ 2.0 ml/litre water for the control of thrips & aphids.
- It is advised to apply mulch and well rotten FYM in vegetable crops to conserve soil moisture.
- Apply Irrigation.

## Horticultural

- Under the present weather conditions, there is a chance of boron deficiency in banana. It is advised to spray one-gram Borax per liter of water.
- There is a chance of blackening of tender fruit due to fungal attack in jackfruit under the prevailing weather condition. Pluck and destroy the affected fruit. For preventing the attack spray Carbendazin@2g/liter of water
- Under the prevailing weather conditions, there is a chance of powdery mildew disease incidence before flowering and after fruit formation in mango. Spraying of Indofil M-45 (Mancozeb Fungicide) @ 2.0g/litre water before flowering or at very early flowering stages.
- Prevailing weather conditions are congenial for incidences of mealy bug on mango plants. Spray Carbaryl(Sevin 85 SP) @ 2.0g / liter of water.
- At the flowering stage and present weather conditions, there may be an attack of hopper in the mango plant. Cypermethrin 10 EC @ 1.0ml per liter of water may be sprayed to manage the attack.
- Apply Irrigation.

## Mustard

- Stage: Pod initiation
- Occurrence of sawfly may be seen in the mustard crops under the present environment conditions. To control this pest spray Chlorpyriphos 20 EC @ 5 ml/litre of water on fair weather.
- The present weather condition is favorable for the incidence of powdery mildew in mustard. Spray of Carbendazim 12% + Mancozeb 62% @ 2g /litre of water is advised.
- Go for intercultural operations.
- Apply light irrigation.

## Livestock

- Take necessary steps to prevent external parasites.
- The temperature can be increased by lighting high-wattage bulbs in cowsheds.
- Give PPR Vaccine to the goat and sheep.
- Vaccinate to prevent blackleg or black quarter and anthrax.
- Give lukewarm water to drink.
- Keep the cowshed neat and clean.
- Feed 50-100g mineral mixture daily with feed to maintain cattle health.

## Poultry

- Protect the chicken from the cold air with plastic bags or plastic screens on all sides.
- Keep the poultry shed clean and dry.
- Vaccinate if not vaccinated against chicken pox.
- Take necessary measures to protect against fungal diseases.

- Let the hens out of the coop a little late in the morning and close the coop door in the evening.
- High wattage bulbs (100 watts or more) in the hen house for 1-2 hours after dusk will increase egg production and reduce disease.

- Apply lime to the pond to protect fish from bacterial diseases during winter. (250-500 gm/percent)
- Prepare the pond. Plan which types of fish you want to farm (Rui, Tangra fish, Horn fish, Magur, Pangas, Pabda, Shol, Tilapia, Lobster, Prawn, etc.).
- Remove black mud from the bottom by watering and drying the bottom well in the sun.
- Uncultivated fish should be removed by water ponds or applying rotenone.
- Repair pond banks if damaged. Drain out excess water from the pond.
- Reduce fish density, and transfer to other ponds if necessary.
- Give quality food.
- Pond's depth will be 1-1.5 m. Keep clean the pond water.
- Ensure enough water in the pond to avoid the harmful effects of low temperatures. 28-32°C is the ideal temperature for fish.
- Reduce food in winter. Stop feeding if needed.