

NATIONAL AGROMETEOROLOGICAL ADVISORY SERVICE BULLETIN

15 FEBRUARY 2023 (THURSDAY) [FOR THE PERIOD 15.02.2023 – 19.02.2023]









<u>DISCLAIMER</u>

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.

SSUED 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 15 February 2023) and maximum temperature on 14 February and minimum temperature on 15 February 2023 is given below:

Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)	Name of Divisions	Name of Stations	Rain fall (mm)	Max. Temp (°C)	Min. Temp (°C)										
										Dhaka	Dhaka	00	27.5	15.5	Chattogram	Chattogram	00	27.0	14.7
											Tangail	00	27.2	13.0		Sandwip	00	28.8	12.3
Faridpur	00	28.2	11.5		Sitakunda	00	30.4	11.0											
Madaripur	00	26.5	11.0		Rangamati	00	29.0	14.8											
Gopalgonj	00	27.5	12.0		Cumilla	00	27.0	11.9											
Nikli	00	27.0	12.0		Chandpur	00	27.2	14.7											
					M.Court	00	27.4	14.0											
Rajshahi	Rajshahi	00	26.7	10.7		Feni	00	29.0	10.8										
	Ishurdi	00	26.0	10.3		Hatiya	00	27.7	13.1										
	Bogura	00	26.6	14.5		Cox's Bazar	00	28.7	16.8										
	Badalgachhi	00	26.0	12.0		Kutubdia	00	29.0	14.0										
	Tarash	00	25.6	13.0		Teknaf	00	30.8	16.0										
Rangpur	Rangpur	00	25.7	13.5	Khulna	Khulna	00	27.6	13.5										
	Dinajpur	00	26.0	11.9	K Protect Market Control	Mongla	00	28.6	14.0										
	Sayedpur	00	26.7	12.6		Satkhira	00	27.3	13.0										
	Tetulia	00	27.0	10.5		Jashore	00	28.2	11.2										
	Dimla	00	26.5	12.5		Chuadanga	00	27.5	10.5										
	Rajarhat	00	27.0	11.0		Kumarkhali	00	28.2	12.3										
Mymensingh	Mymensingh	00	26.6	13.0	Barishal	Barishal	00	28.0	12.0										
	Netrokona	00	28.5	13.0	33.55	Patuakhali	00	27.7	13.2										
		11230.53		1117717111		Khepupara	00	29.0	13.1										
Sylhet	Sylhet	00	28.4	12.9		Bhola	00	27.8	12.0										
	Srimangal	00	27.6	08.6															

Highlights:

- Country average bright sunshine hour was 6.87 hours per day during last week.
- Country average free water loss during the previous week was 2.86 mm per day.

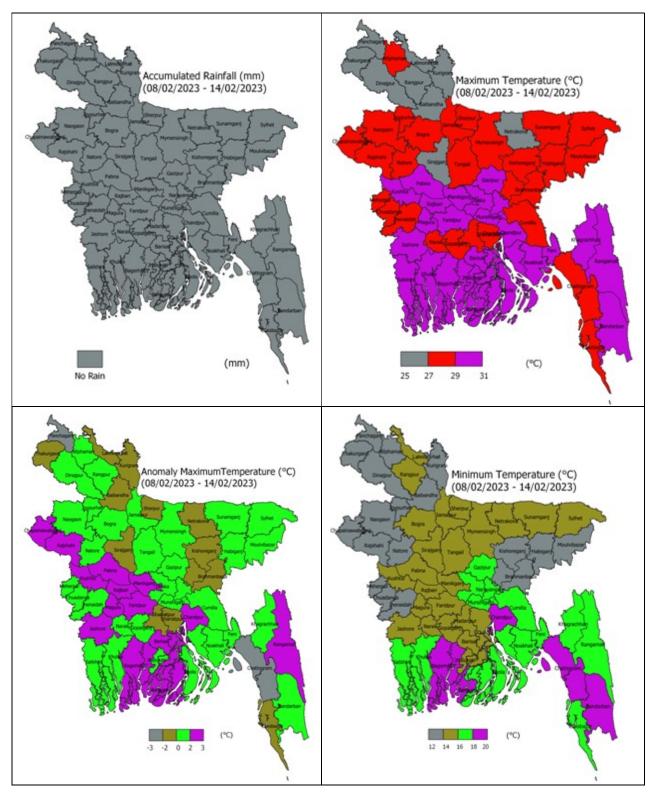
Weather Forecast Valid for 24 Hours commencing 06 PM Today:

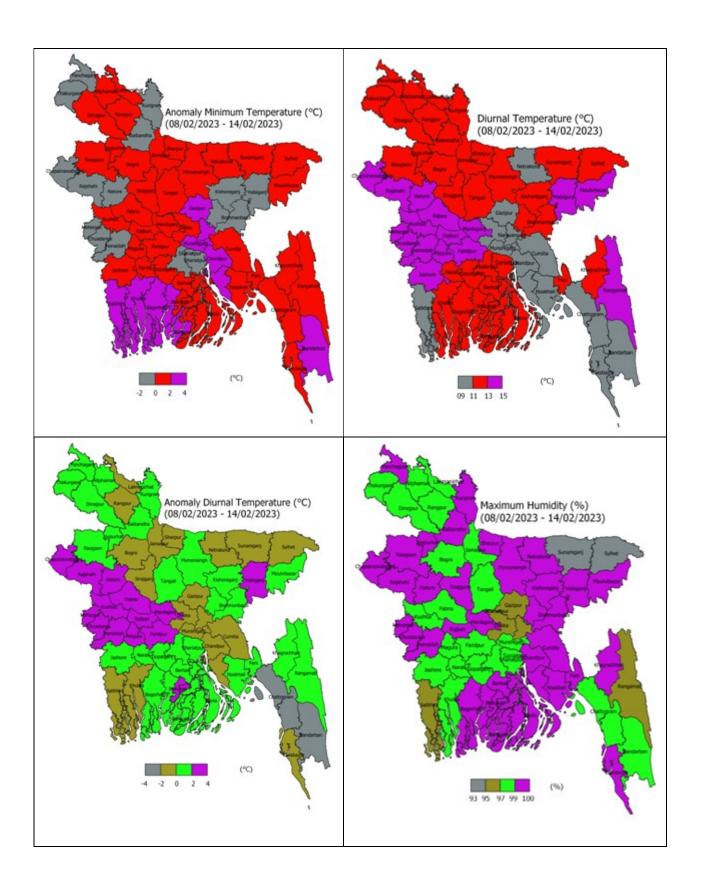
Forecast: Weather may remain dry over the country.

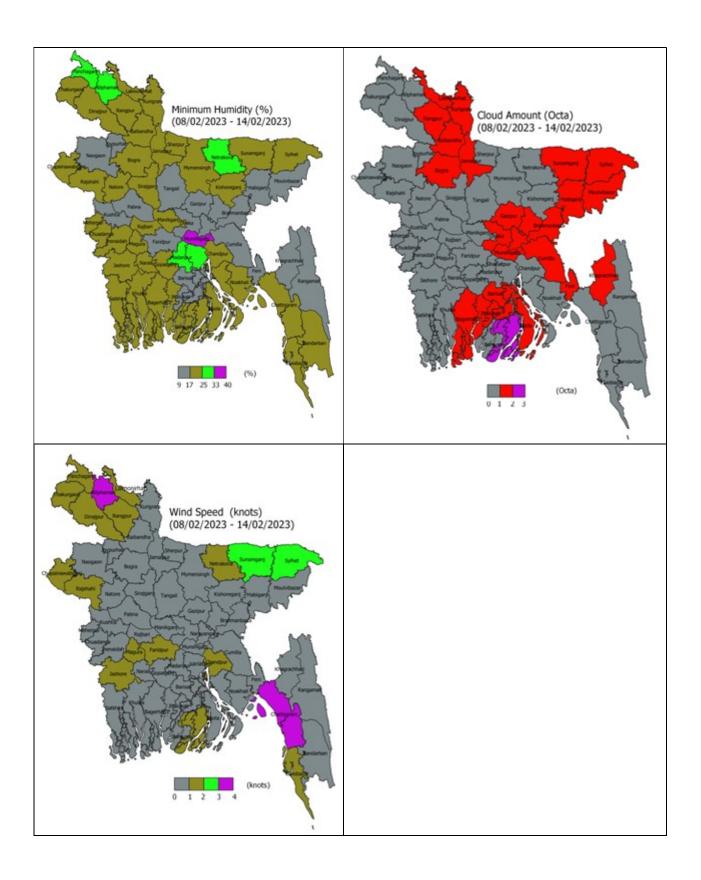
Fog: Light fog may occur at places over the country during early morning.

Temperature: Night and day temperature may rise by (1-2)°C over the country.

Spatial Distribution of weather parameters for the Week ending on 14 February 2023





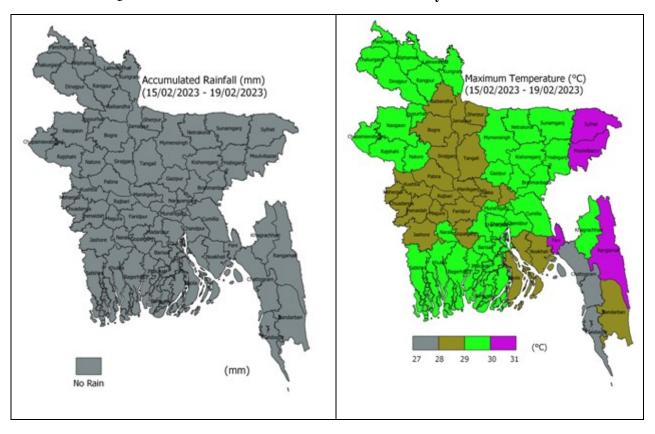


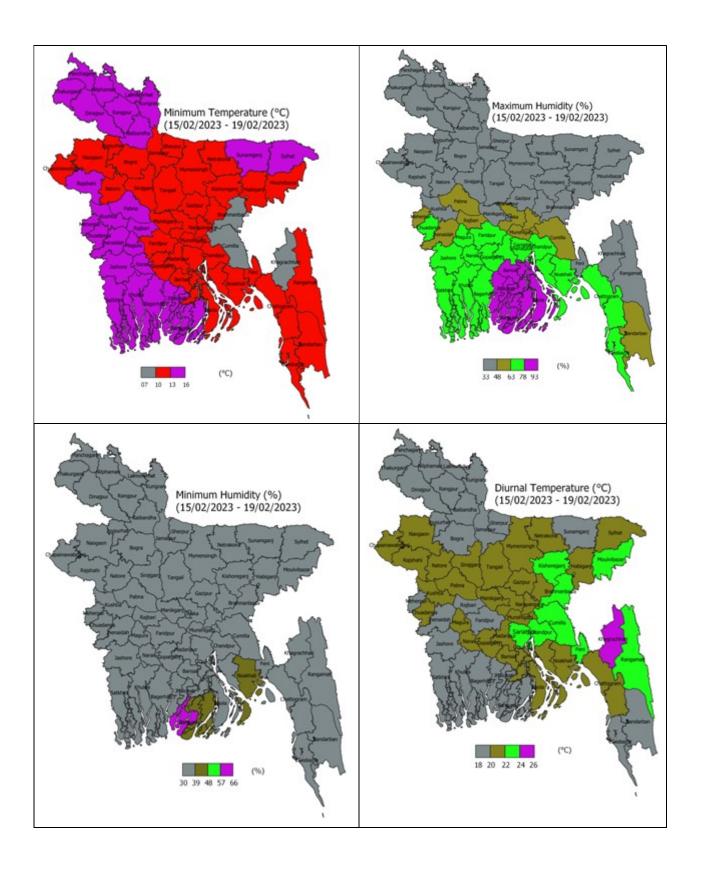
Weather Forecast and Advisory for the Period of 08.02.2023 to 14.02.2023

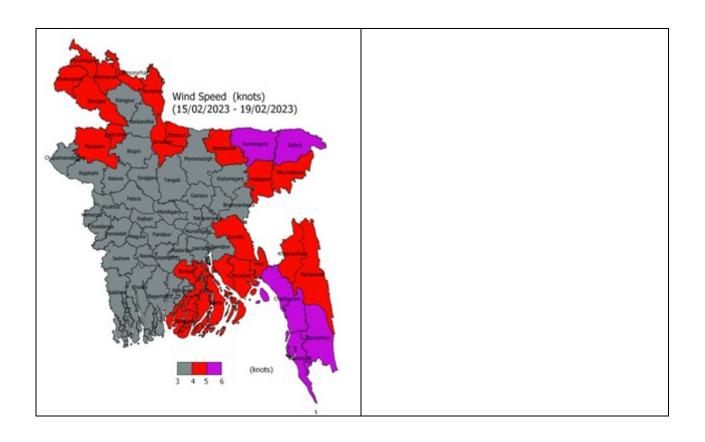
Bright sunshine hour is likely to be from 6.00 to 8.00 hours per day during this week. Average free water loss is likely to be from 2.00 to 4.00 mm per day during this week.

- Weather may remain dry with temporary partly cloudy sky over the country during this period.
- Light fog may occur at places over northern part and river basins & adjoining area of the country during early morning of this period.
- Day & night temperature may rise gradually.

District Wise Quantitative Weather Forecast for next Five days from 15 Feb.- 19 Feb. 2023

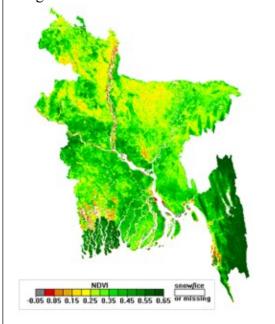




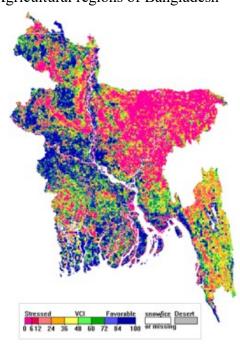


Different Satellite Products over Bangladesh

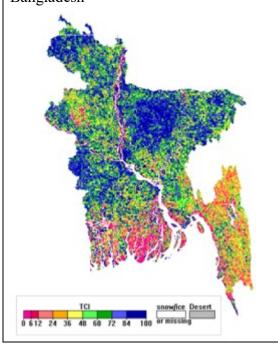
NOAA/VIIRS BLENDED NDVI composite for the week. No. 6 (05 February-11 February) over Agricultural regions of Bangladesh



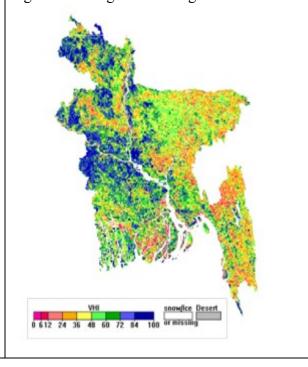
NOAA/ AVHRR BLENDED VCI composite for the week No. 6 (05 February-11 February) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED TCI composite for the week No. 6 (05 February-11 February) over Agricultural regions of Bangladesh



NOAA/ AVHRR BLENDED VHI composite for the week No. 6 (05 February-11 February) over Agricultural regions of 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.

- 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.
- Night temperature is decreasing. So keep the cattle under the shed.

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.

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

Rice Boro

- **Stage**: Heading
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.
- There is a chance of attack of insect/pests like, Rice Stem borer, 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. 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.
- 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.

- 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

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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

- 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

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- 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**: Heading
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.

- There is a chance of attack of insect/pests like, Rice Stem borer, 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. 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.
- 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
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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

- **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.

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.

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.
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- 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

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- 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

- 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.
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- 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.

- 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: Heading
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.
- There is a chance of attack of insect/pests like, Rice Stem borer, 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. 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.
- 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.

- 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.

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.

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.

- 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: 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.
- Present weather condition is congenial for **False smut** infestation. Favorable Weather Temperature 22-27° C

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.

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

Rice Boro

- Stage: Heading
- Arrange proper solarisation within the row by stirring the plants after each 2 rows.
- Where seedlings are 90-110 days old apply last top dressing with urea and potash.
- There is a chance of attack of insect/pests like, Rice Stem borer, 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. 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.
- 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

- 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.

Cumilla Region (Districts: Cumilla, Chandpur, Bramanbaria)

Wheat

- Stage: Flowering
- 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/litre water to control the disease.
- 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, spray Chlorpyriphos 20EC @ 4.0 ml/litre water in the soil at evening hours.
- There is chance of attack of leaf rust disease at this stage of crop. If noticed spray with fungicide Tilt-250EC @ 0.5ml/litre water 2-3 times at 12-15 days' interval.
- 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.

- 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

- 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.

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.

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.

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.

- 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.