AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF NORTH SIKKIM

PERIOD: 19th AUGUST to 23rd AUGUST 2020

IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK

ISSUED ON 18th August 2020

Meteorological Sub-division of Sikkim

As per India Meteorological Department’s classification, Sikkim is a part of Met Sub-Division of Sub Himalayan West Bengal & Sikkim (SHWB & SKM) and is divided into four (4) Districts:

1) North District with HQ at Mangan
2) East District with HQ at Gangtok
3) West District with HQ at Gyalsing
4) South District with HQ at Namchi

Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool
Value Added forecast for NORTH-DISTRICT for next five days

<table>
<thead>
<tr>
<th>Parameter/Date</th>
<th>19/08/2020</th>
<th>20/08/2020</th>
<th>21/08/2020</th>
<th>22/08/2020</th>
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<tr>
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<td>Light rainfall</td>
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<tr>
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<tr>
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<td>Generally cloudy</td>
<td>Generally cloudy</td>
<td>Generally cloudy</td>
<td>Generally cloudy</td>
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<tr>
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<td>90</td>
<td>88</td>
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<tr>
<td>Min RH (%)</td>
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<td>61</td>
<td>69</td>
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<tr>
<td>Wind Speed (Kmph)</td>
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<td>001</td>
<td>001</td>
<td>002</td>
<td>001</td>
</tr>
<tr>
<td>Wind Direction (deg)</td>
<td>W</td>
<td>SE</td>
<td>S</td>
<td>S</td>
<td>SE</td>
</tr>
</tbody>
</table>

There is probability of light rainfall in coming days. Max temp may be around 28-30°C, whereas, Min temp may be around 21-22°C. Sky will remain generally cloudy. Max RH is likely to be 81-94%, whereas, Min RH may vary from 37-69%. Wind speed may likely vary from 1-2 km/hr. Wind direction may blow from southerly direction. Weekly cumulative rainfall= 022.0 mm
AGRO-METEOROLOGICAL ADVISORIES

Keeping the view of above weather summary alert Farmers are suggested to follow the general advisory as below:

- Download and install “DAMINI” app from Google play store that provides lightening alert which may be helpful for precious life of humans well as animal lives.
- Maintain personal hygiene and social distance while working on- field during COVID-19 pandemic situation.
- Start the preparation of nursery for cole crops inside Polly house.
- Keeping in view of light to medium rainfall in coming days, it is advised to provide proper drainage in all vegetables, pulse, maize and nurseries of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.

Maize:
- Crop specific advisory:
  - Under SRI method flooding is not required, only keep the field moist.
  - Dual cropping with Azolla and rice may reduce weed problems and improve productivity through addition of macro and micro nutrients.
  - At least two weeding (25 and 45 days after transplanting) is necessary either manually or by cono weeder to obtain higher productivity.
  - Remove grassy weeds from surroundings to prevent leaf folder infestation.
  - Current weather may favor the growth of rice blast disease, if any symptoms develop it is advised to inform to nearest KVK or ICAR-NOFRI.
  - Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.
  - After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.
  - Bunches of cobs should be hanged from protect to moisture.
  - Sow seeds in well decomposed FYM at 2.0 t/ha + neem cake 100 kg/ha before sowing.
  - Seed treatment with Trichoderma sp. @ 5 kg/kg of seed is recommended before sowing.
  - Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
  - After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.
  - A short day plant, Pahelo dal can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
  - Plant in the first fortnight of August at 30-45 cm row to row and 10-15 cm plant to plant distance.
  - After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.

Black gram (Pahelo Dal):
- Being a short day plant Pahelo dal can be grown after the harvesting of maize in first fortnight of August.
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5 kg/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.

Citrus Crop/Lemon (Horticulture):
- Keep clean the base of plant to avoid citrus trunk borer attack.
- If the attack has found on the crop, apply petrol soak cotton swab in fresh whole and seal it by soil with plastic cover.
- Saturate the borer to attack

Crop specific advisory:

Maize (Crops):
- Late sown varieties may fall down due to heavy rainfall. Provide support to the plants by earthing up.
- Harvest the crops in bright sunny days and keep for drying before storage at 8% moisture content for storage.
- After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.
- Bunches of cobs should be hanged from protect to moisture.
- Sow seeds in well decomposed FYM at 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5 kg/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.

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- Being a short day plant Pahelo dal can be grown after the harvesting of maize in first fortnight of August.
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5 kg/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- After harvesting of the cobs, maize stalks may use as mulch material for succeeding winter season crops.

Citrus Crop/Lemon (Horticulture):
- Keep clean the base of plant to avoid citrus trunk borer attack.
- If the attack has found on the crop, apply petrol soak cotton swab in fresh whole and seal it by soil with plastic cover.
- Saturate the borer to attack
**Large Cardamom (Horticulture):**

- Cardamom is in seed formation stage, so it is advised to the farmers to keep the base area (clump formation area) weed free.
- Application of mixture of water, cow urine and Neem oil (8 l + 2 l + 50 ml) @ 100 ml/plant at weekly interval can avoid the attack of red ant.
- Common advisories:
  - During the previous rainy days the root portions may be exposed, so it is advised to cover the root with soil and locally available organic mulch materials during sunny days.
  - Due to the previous rainy days the root portion may be exposed, so it is advised to cover the root with soil and locally available organic mulch materials during sunny days.
  - Restricted use of Bordeaux mixture (1%) may apply through spot application to overcome soft rot disease.
- Ginger/Turmeric:
  - To prevent leaf curl disease destroy the damaged plants.
  - For aphid's infestation apply Garlic 5% extract or five spray of neem based formulation (1500 ppm) can be done at weekly interval.

**Cucumber (Crop)/Bottle gourd/Bitter gourd (Horticulture):**

- Give support to the plant by trailing them on ladder like bamboo structure to protect from heavy wind.
- Apply pheromone trap (1 trap / 20 nos. of plants) to reduce fruit fly attack.
- Collect and destroy the damaged fruits.
- To prevent leaf curl disease destroy the damaged plants.
- For aphid's infestation apply Garlic 5% extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.

**Tomato/Red Cherry pepper/Brinjal:**

- Stake with the bamboo may require for mechanical support.
- Install pheromone trap for adult fruit borer and fruit flies.
- To prevent the leaf curl disease destroy the damaged plants.

**Poultry and Livestock specific advisory:**

**Chicks:**

- Utmost care is necessary for chicks during initial brooding period (1-14 months).
- Due to prevailing weather condition all the poultry chicks need to be brood (100 watt bulb with continuous electricity supply) to reduce the mortality rate.
- For aphid's infestation apply Garlic 5% extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.

**Chicken/poultry:**

- Maintain proper light at poultry houses to encourage egg production.
- Provide electrolyte to the birds during stressful day.
- Diseased birds should be immediately discarded.
- Regular inspection of droppings of poultry should be done for any diseased symptoms.
Cattle:
- Daily supplementation of liquid calcium @ 70-80 ml is very much essential for milking animals for getting optimum production and to avoid occurring milk fever.
- Regularly check for foot and mouth disease (FMD) of cattle which may spread more during rainy and humid weather situation.
- दृष्ट दिने पठुरुङ्गो लागि दृष्ट ज्योय (व्यास्लिस्यमको अभाव) हुनैट जोखिम र अधिकतम उत्पादन प्राप्त गर्ने लागि नैनैकौन ७०-८०मिलीलिटर तौरल व्यास्लिस्यम दिनुहोस।
- नियमित रूपमा गईबेस्टुको खुट्टा र मुख रोग (एफएमडी) को लागि जॉय गनुहोस जुन वर्षा र आई भौसभ स्थितिमा बढी फैलिन सक्छ।

Goat:
- Enterotoxaemia & PPR vaccine is highly recommended for goat.
- एन्ट्रोटोक्सेगभमा य ऩीऩीआय खोऩ फाख्राको रागग अत्मगधक गसपारयश गरयन्छ।

Pig:
- Dry saw dust and rice husk may be used to keep the shed dry and also to avoid foul smell.
- Maintenance of clean and hygienic condition at pig shed is very much essential to avoid disease infestation and improved optimum growth.
- Mineral mixture @ 40-50 g/day should be fed to pregnant and lactating pigs.
- सनख्खा आया पुलो र चामाको भूमी शेडलाई सुदृढक राख र नैनैनखाट गन्ध प्रयोग गर्न सकिन्छ।
- सूचारुको शेडमा सफा र स्वाँछ अवस्थामा वर्ग रोगको इन्फेस्टेशन र सुधारिएको हुद्दी रोगको लागि धैर्य आवश्यक हुनेछ।
- गसपारयको स्तन्न गरनु सूचारुशेडलाई खनिज भिन्नणा @ ४०-५० ग्राम खुदाउनु पछ्छ।

Agro-Met Advisory member of ICAR-NOFRI and KVK- East Sikkim

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<tr>
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<td>Agro-Met Observer</td>
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PERIOD:
19th AUGUST to 23rd AUGUST 2020
IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK

ISSUED ON 18th August 2020

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### Value Added forecast for EAST-DISTRICT for next five days

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<tr>
<th>Parameter/Date</th>
<th>19/08/2020</th>
<th>20/08/2020</th>
<th>21/08/2020</th>
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<tbody>
<tr>
<td>Rainfall (mm)</td>
<td>Light rainfall</td>
<td>Light rainfall</td>
<td>Light rainfall</td>
<td>Light rainfall</td>
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<td>Max Temp (°C)</td>
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<td>23</td>
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### Weather for preceding week

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<th>Max. Temp</th>
<th>Min. Temp</th>
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<td>16-8-2020</td>
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<td>17-8-2020</td>
<td>037</td>
<td>22.3</td>
<td>18.5</td>
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</table>

### Weather forecast valid up to 23rd August 2020

- There is probability of light rainfall in coming days.
- Max temp may be around 22-24°C, whereas, Min temp may be around 18-19°C
- Sky will remain generally cloudy.
- Max RH is likely to be 90-94 %, whereas, Min RH may vary from 76-84 %
- Wind speed may likely vary from 1-2 km/hr.
- Wind direction may blow from southeasterly direction
- Weekly cumulative rainfall = 040.0 mm
AGRO-METEOROLOGICAL ADVISORIES

General Advisories for all the crops/ livestock

Keeping the view of above weather summary alert Farmers are suggested to follow the general advisory as bellow:

- Download and install “DAMINI” app from Google play store that provides lightening alert which may be helpful for precious life of humans as well as animal lives.
- Maintain personal hygiene and social distance while working on- field during COVID-19 pandemic situation.
- Start the preparation of nursery for cole crops inside Polly house.
- Keep in view of light to medium rainfall in coming days, it is advised to provide proper drainage in all vegetables, pulse, maize and nurseries of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.

Crop specific advisory:

**Rice (Crop):**
- Use SRI method flooding is not required, only keep the field moist.
- Dual cropping with Azolla and rice may reduce weed problems and improve productivity through addition of macro and micro nutrients.
- At least two weeding (25 and 45 days after transplanting) is necessary either manually or by cono weeder to obtain higher productivity.
- Remove grassy weeds from surroundings to prevent leaf folder infestation
- Current weather may favour the growth of rice blast disease, if any symptoms develop it is advised to inform to nearest KVK or ICAR-NOFRI
- Provide support to the plants by earthing up.
- late sown varieties may fall down due to heavy rainfall. Provide support to the plants by earthing up.

**Maize (Crop):**
- Late sown varieties may fall down due to heavy rainfall. Provide support to the plants by earthing up.
- Harvest the crops in bright sunny days and keep for drying before storage at 8% moisture content for storage.
- After harvesting of the cobs maize stalks may use as mulch material for succeeding winter season crops.
- Bunches of cobs should be hanged from ceiling to protect it from moisture.
- After harvesting of the cobs maize stalks may use as mulch material for succeeding winter season crops.
- Keep clean the base of plant to avoid citrus trunk borer attack.

**Black gram (Pahelo Dal):**
- Being a drought resistant crop it can be grow in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
If the attack has found on the crop, apply petrol soak cotton swab in fresh whole and seal it by soil with plastic cover.

Large Cardamom (Horticulture):

- Cardamom is in seed formation stage, so it is advised to the farmers to keep the base area (clump formation area) weed free.
- Application of mixture of water, cow urine and Neem oil (8 l + 2 l + 50 ml) @ 100 ml/plant at weekly interval can avoid the attack of red ant.

Common advisories:

Ginger/Turmeric:

- Due to the previous rainy days the root portion may be exposed, so it is advised to cover the root with soil and locally available organic mulch materials during sunny days.
- Adopt phyto-sanitation measures like infected plants should be uprooted and destroyed.
- Restricted use of Bordeaux mixture (1%) may apply through spot application to overcome soft rot disease.

Cucumber (Crop)/Bottle gourd/Bitter gourd (Horticulture):

- Give support to the plant by trailing them on ladder like bamboo structure to protect from heavy wind.
- Apply pheromone trap (1 trap / 20 nos. of plants) to reduce fruit fly attack.
- Dispose-off the deformed fruits having soft portion on it that may allow growing the insect larva.
- Apply sticky trap (1 trap /100 m² area) to reduce insect pest attack.

Tomato/Red Cherry pepper/Brinjal:

- Staking with the bamboo may require for mechanical support.
- Install pheromone trap for adult fruit borer and fruit flies.
- Collect and destroy the damaged fruits.
- To prevent the leaf curl disease destroy the damaged plants.
- For aphid’s infestation apply Garlic 5 % extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.

Poultry and Livestock specific advisory:

Chicks:

- Utmost care is necessary for chicks during initial brooding period (1-14 months).
- Due to prevailing weather condition all the poultry chicks need to be brood (100 watt bulb with continuous electricity supply) to reduce the mortality rate.

Chicken/poultry:

- Maintain proper light at poultry houses to encourage egg production.
- Provide electrolyte to the birds during stressful day.
- Diseased birds should be immediately discarded.
- Regular inspection of droppings of poultry should be done for any diseased symptoms.
- For aphid’s infestation apply Garlic 5 % extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.
Cattle:
- Daily supplementation of liquid calcium @ 70-80 ml is very much essential for milking animals for getting optimum production and to avoid occurring milk fever.
- Regularly check for foot and mouth disease (FMD) of cattle which may spread more during rainy and humid weather situation.

Goat:
- Enterotoxaemia & PPR vaccine is highly recommended for goat.

Pig:
- Dry saw dust and rice husk may be used to keep the shed dry and also to avoid foul smell.
- Maintenance of clean and hygienic condition at pig shed is very much essential to avoid disease infestation and improved optimum growth.
- Mineral mixture @ 40-50 g/day should be fed to pregnant and lactating pigs.

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AGRO-MET ADVISORY BULLETIN FOR THE
DISTRICT OF SOUTH SIKKIM
PERIOD:
19th AUGUST to 23rd AUGUST 2020
IMD, GANGTOK IN COLLABORATION WITH
ICAR, GANGTOK, FSAD AND HCCD, GANGTOK

Meteorological Sub-division of Sikkim
As per India Meteorological Department’s classification, Sikkim is a part of Met Sub-Division of Sub Himalayan West Bengal & Sikkim (SHWB & SKM) and is divided into four (4) Districts:
1) North District with HQ at Mangan
2) East District with HQ at Gangtok
3) West District with HQ at Gyalsing
4) South District with HQ at Namchi
Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool

ISSUED ON 18th August 2020
Value Added forecast for SOUTH-DISTRICT for next five days

<table>
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<th>21/08/2020</th>
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<td>Light rainfall</td>
<td>Light rainfall</td>
<td>Light rainfall</td>
<td>Very light rainfall</td>
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<tr>
<td>Max Temp (°C)</td>
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<td>26</td>
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<td>Wind Speed (Kmph)</td>
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<tr>
<td>Wind Direction (deg)</td>
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<td>S</td>
<td>W</td>
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Weather for preceding week

<table>
<thead>
<tr>
<th>Date</th>
<th>Rainfall</th>
<th>Max. Temp</th>
<th>Min. Temp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(mm)</td>
<td>(°C)</td>
<td>(°C)</td>
</tr>
<tr>
<td>15-8-2020</td>
<td>001</td>
<td>22.1</td>
<td>19.3</td>
</tr>
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<td>16-8-2020</td>
<td>011</td>
<td>25.5</td>
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<tr>
<td>17-8-2020</td>
<td>011</td>
<td>26.6</td>
<td>19.7</td>
</tr>
</tbody>
</table>

Weather forecast valid up to 23rd August 2020

➤ There will be light rainfall in coming five days.
➤ Max temp may be around 26-27°C, whereas, Min temp may be around 19-20°C
➤ Sky will remain generally cloudy.
➤ Max RH is likely to be 71-89 %, whereas, Min RH may vary from 34-51 %
➤ Wind speed may likely vary from 1-2 km/hr.
➤ Wind direction may blow from southerly direction
➤ Weekly cumulative rainfall= 024.0 mm
AGRO-METEOROLOGICAL ADVISORIES

General Advisories for all the crops/ livestock

Keeping the view of above weather summary alert Farmers are suggested to follow the general advisory as below:

- Download and install “DAMINI” app from Google play store that provides lightening alert which may be helpful for precious life of humans as well as animal lives.
- Maintain personal hygiene and social distance while working on- field during COVID-19 pandemic situation.
- Start the preparation of nursery for cole crops inside Polly house.
- Keeping in view of light to medium rainfall in coming days, it is advised to provide proper drainage in all vegetables, pulse, maize and nurseries of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.

Maize (Crop):
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Late sown varieties may fall own due to heavy rainfall.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- Late harvests are a common problem in maize. It is advisable to harvest at the right time to get maximum yield.
- Maize stalks may use as mulch material for succeeding winter season crops.

Black gram (Pahelo Dal):
- Being a short day plant Pahelo dal can be grown after the harvesting of maize in first fortnight of August.
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- Late harvests are a common problem in black gram. It is advisable to harvest at the right time to get maximum yield.
- Black gram stalks may be used as mulch material for succeeding winter season crops.

Citrus (Crop) / Lemon (Horticulture):
- Apply manure (25 t/ha) and FYM (15 t/ha) in the first two months after planting.
- Apply balanced fertilizer @ 250 kg/ha before budburst and 150 kg/ha during flowering and fruiting stage.
- Apply neem cake (100 kg/ha) once a month during flowering and fruiting stage to control insects.
- Use biopesticides for disease control.

Crop specific advisory:

Rice (Crop):
- Each crop is a series of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Remove grassy weeds from surroundings to prevent leaf folder infestation.
- Dual cropping with Azolla and rice may reduce weed problems and improve productivity due to macro and micro nutrients.
- Current weather may favour the growth of rice blast disease, if any symptoms develop it is advised to inform to nearest KVK or ICAR-NOFRI.
- Maintain personal hygiene and social distance while working on- field during COVID-19 pandemic situation.

Maize (Crop):
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Late sown varieties may fall own due to heavy rainfall.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- Late harvests are a common problem in maize. It is advisable to harvest at the right time to get maximum yield.
- Maize stalks may use as mulch material for succeeding winter season crops.

Black gram (Pahelo Dal):
- Being a short day plant Pahelo dal can be grown after the harvesting of maize in first fortnight of August.
- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Apply well decomposed FYM @ 2.0 t/ha + neem cake 100 kg/ha before sowing.
- Seed treatment with Trichoderma sp. @ 5/kg of seed is recommended before sowing.
- Seed should be sown at spacing of 30-45 cm row to row and 10-15 cm plant to plant distance.
- Late harvests are a common problem in black gram. It is advisable to harvest at the right time to get maximum yield.
- Black gram stalks may be used as mulch material for succeeding winter season crops.

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- Apply manure (25 t/ha) and FYM (15 t/ha) in the first two months after planting.
- Apply balanced fertilizer @ 250 kg/ha before budburst and 150 kg/ha during flowering and fruiting stage.
- Apply neem cake (100 kg/ha) once a month during flowering and fruiting stage to control insects.
- Use biopesticides for disease control.
Keep clean the base of plant to avoid citrus trunk borer attack.
If the attack has found on the crop, apply petrol soak cotton swab in fresh whole and seal it by soil with plastic cover.

- Vigilance should be more kept on small plants as they are more likely to be affected.

Application of mixture of water, cow urine and Neem oil (8 l + 2 l + 50 ml) @ 100 ml/plant at weekly interval can avoid the attack of red ant.

- Keep base clean to avoid Pest attack.
- If the attack has found on the crop, apply petrol soak cotton swab in fresh whole and seal it by soil with plastic cover.

Large Cardamom (Horticulture):
Cardamom is in seed formation stage, so it is advised to the farmers to keep the base area (clump formation area) weed free.

- Application of mixture of water, cow urine and Neem oil (8 l + 2 l + 50 ml) @ 100 ml/plant at weekly interval can avoid the attack of red ant.

Common advisories:
Ginger/Turmeric:
- Due to the previous rainy days the root portion may exposed, so it is advised to cover the root with soil and locally available organic mulch materials during sunny days.
- Adopt phyto-sanitation measures like infected plants should be uprooted and destroyed.
- Restricted use of Bordeaux mixture (1%) may apply through spot application to overcome soft rot disease.

Cucumber (Crop)/Bottle gourd/Bitter gourd (Horticulture):
- Give support to the plant by trailing them on ladder like bamboo structure to protect from heavy wind.
- Apply pheromone trap (1 trap / 20 nos. of plants) to reduce fruit fly attack.
- Dispose-off the deformed fruits having soft portion on it that may allow growing the insect larva.
- Apply sticky trap (1 trap /100m² area) to reduce insect pest attack.

Tomato/Red Cherry pepper/Brinjal:
- Staking with the bamboo may require for mechanical support.
- Install pheromone trap for adult fruit borer and fruit flies.
- Collect and destroy the damaged fruits.
- To prevent the leaf curl disease destroy the damaged plants.
- For aphid's infestation apply Garlic 5 % extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.

Poultry and Livestock specific advisory:
Chicks:
- Utmost care is necessary for chicks during initial brooding period (1-14 months).
- Due to prevailing weather condition all the poultry chicks need to be brood (100 watt bulb with continuous electricity supply) to reduce the mortality rate.
- In case of high mortality rate, drastic steps need to be taken.

- Regular inspection of droppings of poultry should be done for any diseased symptoms.

Chicken/poultry:
- Maintain proper light at poultry houses to encourage egg production.
- Provide electrolyte to the birds during stressful day.
- Diseased birds should be immediately discarded.
- Regular inspection of droppings of poultry should be done for any diseased symptoms.
Cattle:
- Daily supplementation of liquid calcium @ 70-80 ml is very much essential for milking animals for getting optimum production and to avoid occurring milk fever.
- Regularly check for foot and mouth disease (FMD) of cattle which may spread more during rainy and humid weather situation.
- Mineral mixture @ 40-50 g/day should be fed to pregnant and lactating pigs.

Goat:
- Enterotoxaemia & PPR vaccine is highly recommended for goat.

Pig:
- Dry saw dust and rice husk may be used to keep the shed dry and also to avoid foul smell.
- Maintenance of clean and hygienic condition at pig shed is very much essential to avoid disease infestation and improved optimum growth.
- Mineral mixture @ 40-50 g/day should be fed to pregnant and lactating pigs.

Agro-Met Advisory member of ICAR-NOFRI and KVK-East Sikkim

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<td>Agril. Meteorology</td>
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<tr>
<td>Miss Tirtha Kumar Chettri</td>
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AGRO-MET ADVISORY BULLETIN FOR THE DISTRICT OF WEST SIKKIM

PERIOD:
19th AUGUST to 23rd AUGUST 2020

IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK

ISSUED ON 18th August 2020

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1) North District with HQ at Mangan
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3) West District with HQ at Gyalsing
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Issued by: Santanu Das, SMS (Agril. Meteorology), ICAR-KVK, East Sikkim, Ranipool
### Value Added forecast for WEST-DISTRICT for next five days

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<td>26.8</td>
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### Weather forecast valid up to 23rd August 2020

- There will be light rainfall in coming days.
- Max temp may be around 26-27°C, whereas, Min may be around 18-19°C
- Sky will remain generally cloudy.
- Max RH is likely to be 85-94 %, whereas, Min RH may vary from 51-61 %
- Wind speed may likely 1-2 km/hr.
- Wind direction may blow from northeasterly.
- Weekly cumulative rainfall= 022.0 mm
**General Advisories for all the crops/ livestock**

Keeping the view of above weather summary alert Farmers are suggested to follow the general advisory as bellow:

- Download and install “DAMINI” app from Google play store that provides lightening alert which may be helpful for precious life of humans well as animal lives.
- Maintain personal hygiene and social distance while working on- field during COVID-19 pandemic situation.
- Start the preparation of nursery for cole crops inside Polly house.
- Keep in view of light to medium rainfall in coming days, it is advised to provide proper drainage in all vegetables, pulse, maize and nurseries of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.
- Keep clean the base of plant to avoid citrus trunk borer attack.

Maize (Crop):

- Being a drought resistant crop it can be grown in the areas receiving moderate to low rainfall but susceptible to cloudy and foggy weather.
- Keep the view of light to medium rainfall in coming days, it is advised to provide proper drainage in all vegetables, pulse, maize and nurseries of the crops. Farmers are also advised carry out any type of spraying operations in crops.
- Farmers should do weeding and hoeing in the standing crops and vegetables to protect them from weeds.

Rice (Crop):

- Under SRI method flooding is not required, only keep the field moist.
- Dual cropping with Azolla and rice may reduce weed problems and improve productivity through addition of macro and micro nutrients.
- At least two weeding (25 and 45 days after transplanting) is necessary either manually or by cono weeder to obtain higher productivity.
- Remove grassy weeds from surroundings to prevent leaf folder infestation.
- Maintain personal hygiene and social distance while working on animal lives.
- Late sown varieties may fall own due to heavy rainfall.
- Dual cropping with Azolla and rice may reduce weed problems and improve productivity through addition of macro and micro nutrients.
- Remove grassy weeds from surroundings to prevent leaf folder infestation.
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- Azolla and rice may reduce weed problems and improve productivity through addition of macro and micro nutrients.

Maize (Crop):

- Late sown varieties may fall own due to heavy rainfall.
- Provide support to the plants by earthing up.
- Harvest the crops in bright sunny days and keep for drying before storage at 8% moisture content for storage.
- Bunches of cobs should be hanged from ceiling to protect it from moisture.
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Large Cardamom (Horticulture):

- Cardamom is in seed formation stage, so it is advised to the farmers to keep the base area (clump formation area) weed free.

Common advisories:

Ginger/Turmeric:

- Due to the previous rainy days the root portion may be exposed, so it is advised to cover the root with soil and locally available organic mulch materials during sunny days.

- Adopt phyto-sanitation measures like infected plants should be uprooted and destroyed.

- Restricted use of Bordeaux mixture (1%) may apply through spot application to overcome soft rot disease.

Cucumber (Crop)/Bottle gourd/Bitter gourd (Horticulture):

- Give support to the plant by trailing them on a ladder-like bamboo structure to protect from heavy wind.

- Install pheromone trap (1 trap / 20 nos. of plants) to reduce fruit fly attack.

- Collect and destroy the damaged fruits.

- To prevent the leaf curl disease destroy the damaged plants.

- Apply 5% extract or five spray of neem based formulation (1500 ppm) can be done @ 5 ml/lit. at weekly interval.

Poultry and Livestock specific advisory:

Chicks:

- Utmost care is necessary for chicks during initial brooding period (1-14 months).

- Due to prevailing weather condition all the poultry chicks need to be brood (100 watt bulb with continuous electricity supply) to reduce the mortality rate.

- Proper nutrition is necessary for chicks during initial brooding period (1-14 months).

- Due to prevailing weather condition all the poultry chicks need to be brood (100 watt bulb with continuous electricity supply) to reduce the mortality rate.

- Provide electrolyte to the birds during stressful day.

- Diseased birds should be immediately discarded.

- Regular inspection of droppings of poultry should be done for any diseased symptoms.

- Chicken/poultry growth stimulant

- Maintain proper light at poultry houses to encourage egg production.

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- Daily supplementation of liquid calcium @ 70-80 ml is very much essential for milking animals for getting optimum production and to avoid occurring milk fever.
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<td>SMS, KVK, East Sikkim</td>
<td>Agril. Meteorology</td>
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<td>Miss Tirtha Kumari Chettri</td>
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<td>Agro-Met Observer</td>
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