

## **State Advisory for Farmers during COVID 19 lockdown**

### **General precautions and safety measures in harvesting, post-harvest operations, storage and marketing of produce**

In order to avoid the field level contagious spread of Corona virus in agrarian activities, farmers are advised to follow the following precautions:

- In case of manual field operations of harvesting/ picking, accomplish the operation in 4-5feet spaced strips assigning one strip to one person. This will ensure adequate spacing between the engaged labour.
- All the persons engaged should use masks and ensure hand washing with soap at reasonable intervals.
- Maintain safe distance of 3-4 feet during rest, taking of meals, transfer of produce at collection point, loading/unloading.
- Stagger the field operations wherever possible and avoid engaging more number of persons on the same day.
- Engage only the healthy persons to the extent possible and after reasonable enquiry as to avoid the entry of any suspect or likely carrier during field activity.
- Prefer mechanized operations over the manual ones wherever feasible. Only the essential numbers of persons should be allowed to accompany the machine.
- All machines should be sanitized at the entry point and at regular intervals. All transport vehicles, gunny bags or other packaging material should also be sanitized.
- The collection of the produce may be done in small heaps spaced at 3-4 feet and field level processing should be assigned to 1-2 persons/heap to avoid crowding.
- In case the farm level storage is possible, avoid immediate rush to the market.
- Follow the standard safety measures during the visit to market for the purchase of inputs/sale of produce.

### **State-specific guidelines and advisories**

#### **1. Andhra Pradesh**

##### **Guidelines: File No.AGC02-12027(31)/8/2020-SEED SEC-AGRHOD (AP)**

1. Guidelines issued in support of continuation of production, processing and supply chain and transportation of seed, fertilizer and pesticides in the State of Andhra Pradesh.
2. Harvesting, post harvesting, shipment of raw seeds and packing activities of all seed crops which are in peak across the State to continue with respect to Hybrid Maize, Sorghum, Forage Crops, Pearl Millet, Cotton, Pulses, Rice, Groundnut, Vegetable Seeds etc
3. Transport of seeds from farmers' fields to processing plants of seed companies permitted after due inspection based on accompanying supporting documents

4. Fertilizer & Pesticides dealer shops shall remain open and continue functioning. The farmers to maintain 3 feet distance while purchasing the inputs

### Advisory

- Paddy is in grain filling to grain hardening stage. Incidence of neck blast, stem borer and panicle mite is observed. Prevailing high relative humidity conditions are congenial for further spread of the neck blast disease and hence foliar spray of Tricyclazole @ 0.6 g or Isoprothiolane @ 1.5 ml or Kasugamycin @ 2.5 ml per litre of water is advised.
- Precautions and safety measures of workers engaged in repair, maintenance and harvesting operation with combiners is to be ensured at the time of paddy harvesting
- Availability of harvesters at nearby locations can be known from CHC Farm Machinery App by farmers in Andhra Pradesh.
- Rice fallow black gram is at flowering to harvesting stage, summer green gram crop is at vegetative stage. Measures to manage whitefly incidence to be taken up to control yellow mosaic virus disease incidence
- Maize is at flowering to harvesting stage and incidence of fall army worm is noticed which is to be managed with recommended insecticidal sprays or baiting. Care to be exercised while operating threshers after harvesting of cobs.
- Sesame is at capsule formation stage, foliar nutrient spray with soluble fertilizer (19:19:19) or multi K @ 2.5 kg/ha
- Chillies crop is at third to fourth picking stage, incidence of thrips and mites is noticed and safety precautions to be followed in use of spraying equipment by contract workers/ farmers
- Fruit drop is likely in Mango, nutrient spray with 1% urea or Planofix @ 1 ml per 4.5 liters of water is advised. Care to be exercised by workers while mixing of inputs and application.
- Root rot disease incidence in citrus and oranges is noticed and safety precautions to be taken in applying foliar sprays and application of manures and organic ammendments at base of trees.
- Spiralling whitefly is a major problem faced by coconut, oil palm and guava farmers. Recommended control measures as advised by KVKs/ SAUs to be followed. Chemical sprays to be avoided against this pest.

## 2. Arunachal Pradesh

**Guidelines and Advisory:** The guidelines of GoI are followed in the state. Safety measures and social distancing to followed in all agricultural operations.

- In Jhum farming, its right time for the sowing of rice and maize by engaging family labour
- In maize, deep ploughing and adoption of intercropping with black gram / green gram is advised and installation of pheromone trap @ 5/acre immediately after germination is advised for management of fall army worm

- Store potato in cool, ventilated bamboo structures with no windows on 3 to 4 inch layer of dry sand. Additional storage can be created in kitchens with false ceiling made of bamboo.
- Foliar sprays in vegetable crops such as bhendi and bitter gourd to be taken up against leaf spots and fusarium wilt. Hand glove and mask should always be worn during the spraying of fungicides and insecticides in the field and equipment should be washed properly before and after use.
- Among the vegetable crops, Cauliflower, Cabbage, beans and other cucurbits, green coriander, spinach etc. are in harvesting/picking stage and supplying to market with the help of FPO/FPC and SHGs as per the demands.
- Agricultural operations should be done with machine driven equipment as much as possible. Sanitize the equipment with soap water at least 3 times a day, when handmade cutting equipment is used.

### 3. Assam

**Guidelines and Advisory:** The guidelines of GoI are followed in the state. Safety measures and social distancing to followed in all agricultural operations.

- As the harvesting of different field crops, vegetables, fruits etc. are on-going, farmers' are advised to follow safety measures in farm operations
- Harvesting of field crops like lentil, linseed, mustard is due and after harvest, proper drying is essential for good storage.
- Proper sanitation is required while using shared/ hired implements or machineries for harvesting operation. Harvesting is to be done by maintaining proper isolation distance of personnel engaged.
- Shelf life of harvested tomato can be extended by adopting traditional method in case of delay in marketing.
- As the cold storage service is exempted from lock down, potato, tomato and chillies may be stored in nearest cold storage after obtaining passes with all safety restrictions.
- Prefer farm level storage wherever possible for better price rather than to avoid rushing to markets immediately after harvesting to sell at prevailing lower prices if any
- Farmers can sell their vegetable produce to identified vendors by the Department of Agriculture. Self and vehicle passes may be obtained prior to movement for transportation of vegetables.
- FPOs may also initiate selling of farmers produce after obtaining proper permission from the district administration
- Retail shops dealing with fertilizer/seeds are allowed to operate during lockdown for limited time window. Social distancing of at least 1 m is to be maintained while purchasing seeds and fertilizers.

## 4. Bihar

### Guidelines

- All shops of seed/ fertilizer/ pesticides will remain open. Farmers can meet their input needs and while purchasing to avoid crowding and to follow social distancing.
- Farmers are allowed free movement for farm activities like harvesting and threshing by maintaining social distancing
- As much as possible use farm machinery for operations.
- During field operations by labour, food and water to be consumed separately. Don't share with each other.
- Wash hand with soap and water repeatedly. Drink plenty of water during farm operations.
- Use mask to cover mouth and nose. Clothes must be washed after harvesting and threshing.
- Avoid touching eyes, nose and mouth frequently to avoid contamination.
- Burning of crop residue in the field to be avoided completely
- Appraise and consult Agriculture Advisor or Agriculture Coordinator for any emerging problem in farm related activities.

### Advisory

- Lentil is at harvesting stage while gram and wheat will take another 20-25 days to mature. Harvesting should be at proper maturity. No need to irrigate the field as there was good rain in recent past.
- Summer ploughing in the vacant field after harvesting of Lentil is essential.
- In Vegetables like tomato, brinjal, chillies etc. apply hoeing and irrigation as per requirement. Also apply required amount of nitrogen.
- Leafy vegetables like palak, chaulai, bathua etc. can be sown for summer season.
- Mealy bug in mango and litchi can be controlled by spraying Imidacloprid 17.8%SL @ 1 ml/ 3 lit water.
- Mite in litchi can be controlled by using Ethion 50 EC @ 2 ml/ lit water.
- Powdery mildew in mango can be managed by applying recommended fungicide

## 5. Chhattisgarh

### Advisory

- State government permitted minimum labour for work in agriculture and horticulture farm with proper sanitation measures and directions as issued by CG Govt.
- Toll free Number 07868-241550 started at district head quarter for solving problems of farmers regarding crop harvesting and input availability etc.
- Ensure availability of water, soap and mask during field operations
- Use of separate water bottle during cutting of crops and other agricultural operations.
- Advisory issued to farmers for plucking fruits and vegetable in their farms and transport to market without any restrictions
- Wear disposable rubber boots, gloves and triple layer mask during cutting and threshing of crops advised.
- If seed production is being taken then pick, roguing to be adopted to remove off type plants and thresh separately for maintenance of seed purity.
- Keep the storage place ready before crop harvest which should be protected and safe.

- Avoid crop residue burning after harvest. In harvested field, spray waste decomposer and plough the field and repeat the spray at 8 – 10 days after ploughing for proper in situ decomposition.
- Farmers are advised for summer deep ploughing of the field.
- Manage irrigation in mango, citrus and other fruit crops
- In tomato, brinjal, chillies, bhendi, and other vegetables, apply hoeing and irrigation as needed and give the required amount of nitrogen fertilizer.
- Summer green gram is at maturity stage and ready for harvest.
- Seed of leafy vegetables like Amaranthus, ipomoea aquatica, Chaulai and Bathua, spinach should be sown for summer season.
- Leafy coriander should be sown during the first week of April using paddy straw mulch to minimize the evaporation rate in summer.
- Cowpea, Okra and cucurbits like Ridge gourd, Sponge gourd, Cucumber, pumpkin, Bottle gourd and Bitter gourd should be sown in nursery for seedling purpose.
- Colocasia leaf blight is noticed in farmer's field and disease management with fungicide is recommended
- Onion is at maturity stage, hence crop should not be irrigated.
- Temperature is favourable for whitefly attack in okra and papaya, hence use yellow sticky trap & apply recommended foliar spray of insecticide
- Make proper arrangements for housing, nutrition and health management for young animals during summer time.

## 6. Goa

**Guidelines: Letter No. 3/5/EXT/240/2019-20/D.Agri/802 dated on 28/03/2020**

1. The Director of Agriculture, Government of Goa is authorized to issue Travel Permit for the farmers and their vehicles; those are engaged in cultivation and harvesting of field crops.
2. All the Zonal Agriculture Officers are instructed to seek application forms from the desired Farmers/ Service Providers/ Procurement Agencies for issue of travel permits in prescribed format.
3. The application form duly filled-in and recommended by concerned Zonal Agriculture Officer or authorized Assistant Agriculture Officer, should be forwarded to Director of Agriculture by email for issuing travel permit.
4. While recommending the travel permit, due care must be taken that the travel pass would not be misused by the holder.
5. KVK staff at District Disaster Management Cell under the district collector for emergency services can be contacted for advisory.

## 7. Gujarat

**Guidelines Circular No.GG/20/2020/V-1/KAV/102020/482, dated 23.03.2020; Gujarat Information Bureau dt 27-03-2020; GoI MHA order dated 29.03.2020**

1. Animal feeds and fodder, medicine and treatment related services are exempted from restrictions during lockdown period.
2. Selling of Fruits, Vegetables and Milk Products are exempted from restrictions.

3. Seeds, Fertilizer and Pesticides (Regulates Shops) dealers shall continue functioning and shall remain open.
4. Farming Operations by farmers and farm workers in the field are exempted from restrictions
5. Custom Hiring Centers (CHC) related to farm machinery are exempted.
6. Farmers and Farm labours have been allowed to irrigate the field as per the availability of electricity as well as harvesting, picking and other works related to Rabi crops.
7. Farmers can contact government control room help line no 1077 at district level.

## 8. Haryana

### **Guidelines: 3995-4016/JD(AC)**

1. Permitting free movement of farmers and farm labour for farming operations of harvesting and sowing thereafter.
2. Free movement of farm operation machinery including harvesting machinery and transport vehicles for carrying the farm produce.
3. Permitting operation of Custom Hiring Centres to farm machinery in the cooperative and private sector.
4. Preparing the marketing yards for wheat arrivals and readiness of the procurement agencies for MSP operations. Permitting sale of seeds, fertilizers, pesticides and insecticides

### **Advisory:**

Simple safety measures and precautions while performing farm operations have been issued to farmers with respect to harvesting, threshing, storage and marketing of major crops cultivated in the state: wheat, mustard, gram and vegetable crops

- Wheat in large area will be ready for harvest after 14<sup>th</sup> April for harvesting through combines. Due of untimely rain during March, the harvesting of wheat is delayed and wheat harvesting will start after 5<sup>th</sup> April and peak will be between 15 to 30<sup>th</sup> April. In case wheat harvesting is delayed due to the scarcity of combines or otherwise, wheat crop at maturity becomes prone to fire and therefore adequate care should be taken on this count.
- About 70% of barley harvesting is over mainly in south-west Haryana and remaining shortly.
- Mustard is the second important rabi crop which largely has been manually harvested but threshing is due in most of the cases.
- Harvesting of Gram and lentil is delayed due to rains and is approaching in first fortnight of April.
- Among the vegetable crops, tomato, cauliflower, cucumber and other cucurbits, green coriander, spinach etc. are in harvesting/picking stage and supplied to market.

## 9. Himachal Pradesh

### **Guidelines: File no.DC\MAN\LA\2020-1636-95**

1. Permitting farm operation in progeny cum demo orchards (PCDOs), nurseries, Post Entry Quarantine (PEQ) sites for plantation of improved planting material

2. Hassle free movement of refrigerated vans carrying live imported planting material and maintenance of cold storage and warehouses
3. Permission of placement and transportation of honey bee colonies and extraction of honey from bee-boxes, harvesting and transportation of flowers (cut flowers), mushrooms etc.
4. Permitting transportation and distribution of anti-hail nets to farmers and orchard growers

### **Advisory**

- Wheat crop is still in reproductive phase and harvesting will start by end of April and likely to end by mid-May, social distancing should be maintained while harvesting and threshing of produce
- Harvesting of mustard and pulses will start during 1<sup>st</sup> week of April and over by 2<sup>nd</sup> week of May, social distancing and hygiene should be maintained

## **10. Jammu & Kashmir**

### **Guidelines: File no.Agri/Dev-185/2019-20/Camp-DMI**

1. Hassle free maintenance of supply chain to be maintained from the source to the sink which include harvesting, collection, transportation, storage and sale of produce
2. Permission of carry out the farm operations for ensuing Kharif 2020 season in valley and facilitate hassle free movement of inputs and machinery
3. Easy access to quality seed/fertilizers for use in farms

### **Advisory**

- Wheat harvesting will start in 2<sup>nd</sup> week of April and likely to be over by 25<sup>th</sup> April whereas mustard harvesting will start in the 1<sup>st</sup> week of April and over by 20<sup>th</sup> April. Social distancing should be maintained while harvesting and threshing of produce.

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## 12. Himachal Pradesh

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## 11. Jharkhand



## Guidelines

- All shops of seed/ fertilizer/ pesticides will remain open. Farmers can meet their input needs and while purchasing to avoid crowding and to follow social distancing.
- Farmers are allowed free movement for farm activities like harvesting and threshing by maintaining social distancing
- As much as possible use farm machinery for operations.
- During field operations by labour, food and water to be consumed separately. Don't share with each other.
- Wash hand with soap and water repeatedly. Drink plenty of water during farm operations.
- Use mask to cover mouth and nose. Clothes must be washed after harvesting and threshing.
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- Appraise and consult Agriculture Advisor or Agriculture Coordinator for any emerging problem in farm related activities.

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- Summer ploughing in the vacant field after harvesting of Lentil is essential.
- In Vegetables like tomato, brinjal, chillies etc. apply hoeing and irrigation as per requirement. Also apply required amount of nitrogen.
- Leafy vegetables like palak, chaulai, bathua etc. can be sown for summer season.
- Mealy bug in mango and litchi can be controlled by spraying Imidacloprid 17.8%SL @ 1 ml/ 3 lit water.
- Mite in litchi can be controlled by using Ethion 50 EC @ 2 ml/ lit water.
- Powdery mildew in mango can be managed by applying recommended fungicide

## 12. Karnataka

### Guidelines (GO dt 26.03.2020) and Advisory

1. There shall be no congregation of more than 5 persons in any processing and storage units.
2. Proper sanitation shall be ensured in all premises
3. Sufficient provision of masks/sanitizers/hand washing soaps and water shall be made available
4. All the fertilizer dealer shops shall remain open
5. Farmers shall maintain minimum 4 ft distance in all these outlets while buying seeds, fertilizers and chemicals
6. Payment to be done by using POS machines, sanitizing thoroughly after every use, both the machine as well as user's hands/fingertips
7. Transport the horticultural produce, fruits and vegetables to markets is permitted to markets in local and outside districts/ states
8. Farmers are permitted to sell their produce to wholesale merchants at farm gate
9. Wholesale merchants of horticultural produce must provide and ensure the use of masks and sanitizers to the labour involved in collection and transportation of horticultural produces.

## Advisory

- Paddy is being harvested in most parts of Hyderabad-Karnataka. Harvesting and threshing through Combine is being facilitated by making available the required number of Combines. Custom Hiring Centres are encouraged to facilitate the availability of required machines. Movement of Combines is permitted across the states.
- Summer paddy transplanting may be done using machines followed by broadcasting of appropriate weedicides.
- Alternatively, farmers should go for Paddy Direct Sowing using Drum Seeders to overcome labour problem and to minimize cost of cultivation.
- Groundnut harvesting in parts of Karnataka is about to start in coming weeks. Farmers may resort to machine harvesting to the extent possible. Please follow all the guidelines of the Govt regarding social distancing, and use of sanitizers if manual harvesting is necessary.
- Farmers are advised to plan for direct marketing of produce which is ready for harvest. Use cold-storage structures available within the district to avoid distress sale.
- Wherever possible, use N fertilizers and irrigate to postpone harvesting stages. In Pomegranate, also use NAA in appropriate dose to delay maturity.
- Grapes can be dried and converted to Raisins (dried-grapes) to avoid fresh marketing. Delay pruning of grapes by one month.
- Mango crop may be sprayed with Mango Special nutrient mixture to ensure good growth and size of fruits. Set up fruitfly-traps to monitor fruitfly incidence, and wherever required, consult the nearest KVK for necessary advise.
- Vegetables that are in the harvesting stage must not be sprayed with chemicals before harvest. Please ensure pesticide-residue-free products to markets.
- Transport of vegetables and food products is not restricted as per Govt Orders. Please contact District Administration for necessary support and permits. Farmers Organizations may help in aggregation of produce and marketing.

## 13. Kerala

**Guideline:** Kerala State Government has issued instructions to the district administration exempting the following during lockdown:

1. All farming activities with minimum labourers
2. Animal husbandry activities
3. Custom-hiring centres activities
4. Functioning of eco-shops and FPO activities
5. Harvesting, procurement and marketing of crops and produces
6. Essential services of offices for salary payment
7. Functioning of community kitchen at Panchayat level

## Advisory

- To manage Coconut Rhinoceros beetle, provide field sanitation to prevent breeding of beetles. Apply 250g neem cake or marotti (*Hydnocarpus wightina*) cake mixed with equal volume of sand in the innermost 2-3 leaf axils during April-May before the onset of south-west monsoon. Treat manure pits and other possible breeding sites with *Metarhizium*
- In vegetables, manage sucking pests aphids, mites, white flies, thrips, caterpillars etc.

- Erect blue/yellow sticky traps just above the leaf level to trap insect pests.
  - Spray 2% neem oil garlic emulsion every week. Care must be taken to cover both sides of the leaves during spraying.
  - Spray *Lecanicillium* 20g/litre at fortnightly intervals.
  - If infestation is severe, against Aphids, whiteflies, jassids- spray Thiamethoxam 25WG , 2g/ 10litre; and against Mites, spray Spiromesifen 240SC , 0.8-1ml/ litre.
  - Spray Beauveria 20g/litre as a prophylactic measure against caterpillar pests
- Paddy harvesting using machines, with the support of green army custom hiring centres. Follow all guidelines regarding social distancing and sanitization.
- In districts where paddy is in tillering stage, apply 2.5 kg Pseudomonas/ha mixed with 50 kg cowdung for one hectare and avoid excess usage of nitrogen fertilizers as a prophylactic measure to control blast and sheath rot diseases.
- It is the ideal time for planting material preparation in pepper crop. Apply mulch and protect the plants from scorching sun.

## 14. Madhya Pradesh

### Advisory

- Harvesting and threshing of wheat, lentil, chickpea and mustard should be done, if not yet not done.
- Farmers may start the field preparation and sowing of summer mung in irrigated areas after harvest of wheat and chickpea
- Ensure availability and maintenance of farm machinery needed for field preparation and sowing in kharif season
- Wear personal protection equipment and mask and maintain social distance in farm operations
- Sanitize farm implements before use in agricultural operations
- Adopt suitable time for sowing of cucurbits and summer maize
- Timely intercultural operation of vegetable crops like brinjal, tomato, bhendi and chillies along with fertilizer and irrigation management as per need.
- Farmers are advised to decide the transplanting time of vegetables crops like – sponge gourd, water melon and musk melon.
- Horticulture crops mainly farmers who want to plant fruit gardens, prepare pits and keep them open for treatment, as well as select varieties of fruit trees and arrange for planting.
- Intercultural operation and urea application are advised in summer vegetables like pumpkin, bitter gourd, bottle gourd, okra etc.

## 15. Maharashtra

### Guidelines D.O. Letter No. 11836I & QC/DisM dated 27/03/2020; G.O. No.14 of Dept of Fisheries dated 26.03.2020

1. Farmers can move in their fields for day to day operations in farming, farmers have no restrictions for movement.

2. Fertilizer & Pesticides dealer shops shall remain open and continue functioning. The farmers/buyers are advised to maintain 3 feet distance while purchasing the inputs.
3. All goods vehicles carrying the essential commodities like fertilizers and pesticides shall be allowed to ply during the lockdown period in the state.
4. Dealers are requested to provide the hand sanitizers and ensure hand sanitization by the farmers before and after the purchase of inputs.
5. All the stakeholders involved in fertilizers rake operation *hamalis*, labour hired, loading and unloading operations, etc. shall continue the operations following adequate safety measures to protect from Covid-19.
6. There shall be no congregation of more than 5 persons in any farming operations, processing storage operations.
7. All the APMCs remain open, so farmers can send their produce to nearby APMCs.
8. The vehicles carrying the seeds from farmers fields to the processing plants and from one processing plant to other processing plants and to distribution points and to retailers are permitted after due inspection.
9. No restriction on movement of fertilizers and pesticides and their raw materials required for farmers from one place to another place.
10. While selling of vegetables in the market a social distance of 3 feet is to be maintained between the customers to sellers.
11. Farmers can also avail the cold storage facilities to store the perishables produce.
12. Farmers permitted to sell their vegetables/ fresh farm produce to different housing societies after due permission of Department of Agriculture through Taluka Agricultural Officers.
13. Centres like seed processing plant, packaging, seed selling units remains open and their transportation is permitted as essential commodities for farmers.
14. Warehousing activities relating to seeds, fertilizers pesticides are permitted to continue in the state by following all safety measures related to COVID-19.
15. Movement of fish, feed and related commodities including feed ingredients is permitted from one place to market and permitted to sell.

### Advisory

- Matured crop of sorghum, gram and wheat can be harvested. The harvested produce should be threshed and kept at safe storage places.
- To save the crops from thunder storm, lightning, gusty winds rainfall as well as hail storm harvest mature crops, horticultural crops and vegetable crops as early as possible and store them at safe places.
- Harvested safflower, rabi sorghum and wheat crops should be collected and covered by plastic paper. Store threshed crops at safe places.
- If harvested and boiled turmeric crop was put for sun drying should be collected and covered by plastic paper. Protect the turmeric crop from unseasonal rains.
- Mature citrus crops should be harvested as early as possible. The broken branches or injured branches due to hail and unseasonal rainfall should be removed.
- In case of pomegranate, the broken branches or injured branches due to hail and unseasonal rainfall should be removed. Take a spray of 10 gm Carbendazim per 10 litre of water immediately after pruning. During such condition heavy dropping of fruits and flowers is observed; destroy the dropped and damaged fruits property.
- Bunch support or bunch propping is necessary in banana orchard planted in the month of June. Earthing up should be done in banana orchard.

## 16. Manipur

### Guidelines and Advisory

- Shops/ establishments dealing with dairy products, meat, fish, meat, fodder/ feed, fruits and vegetables etc are allowed to open till further orders.
- Online vegetable vendor ([www.freshiesfresh.com](http://www.freshiesfresh.com)) is allowed to supply vegetables through online bookings in both Imphal East and Imphal West district.
- Imphal East district administration and E-keithen has been allowed to start home delivery of fruits, vegetables and grocery items across Imphal urban areas.
- Imphal West district administration and TARE has been allowed to start home delivery of fruits, vegetables and grocery items across Imphal urban areas.
- Delay in harvesting of crops like lentil and toria by 7-10 days.
- Farmers are advised to clean the house of animals and poultry birds regularly with phenol@1 ml/ l of water to prevent infection. Poultry birds may be fed with green leaves along with grinded maize/ rice. Safety measures in handling to be followed.
- Farmers who are facing problems to get feed for piggery may produce their own feed by cooking maize/ rice grain, seasonal vegetables, colocasia roots, kitchen waste with dry fish etc.
- In jhum cultivation, farmers are advised to maintain social distancing while preparing fields for various crops.

## 17. Meghalaya

### Guidelines and Advisory

- Farming operations by farmers, fruit-vegetable sellers, custom hiring centres of farm machineries, agriculture input distribution are exempted from the purview of lockdown.
- The local headmen are empowered to regulate the shops dealing with essential commodities in consultation with district administration.
- The sale of commodities like vegetables, strawberry, eggs, milk etc. by contacting iTEAMS-1917 (Integrated Technology Enabled Agri Management System), Govt. of Meghalaya from 7 am-7 pm through the toll free no. 1917 to pick up the commodities from the door step of farmers for onward marketing.
- Inputs like maize seeds, lime, biofertilizers will be supplied at the door step of farmers through line departments
- Farmers facing difficulty in marketing farm produce such as strawberry are advised to produce value added products like wine, jam, jellies, squash.
- The peak sowing operations in ginger, turmeric, maize, cucumber should be taken up by following social distancing by workers

## 18. Mizoram

### Guidelines and Advisory

- Vehicles carrying essential commodities like food items, fruits, vegetables, feed staff are exempted from the preview of statewide lockdown so as to continue the supply system.
- The Department of Horticulture has been given responsibilities to look into the collection, transportation, storage and distribution of fruits and vegetables by fixing an appropriate rate in consultation with the Department of Commerce& Industries, Civil Supplies and village level task force.
- In Jhum cultivation, farmers to work in their fields by maintaining social distancing and not in groups
- Surplus of perishable commodities in the villages need to be informed to district administration / Department of Horticulture, Govt. of Mizoram.
- Since supply chain is greatly disturbed, the farmers are advised to keep their own seeds of crops like seasonal vegetables, maize for next season
- Village level task force to be formed by district administration to facilitate marketing of agricultural commodities within the locality by maintaining social distancing.
- Collection of feeds for livestock from forest may be allowed till the situation arises out of COVID-19 is under control so as help the farming community
- The peak sowing time of ginger, turmeric, maize, cucumber should be taken up by family labour / maintain social distancing with hired labour

## 19. Nagaland

### Guidelines and Advisory

- Agencies engaged in procurement of Agriculture products, fertilizer shops are exempted from the purview of lockdown.
- Farming operations by farmers in their own field are exempted by maintaining social distancing.
- Custom hiring centres relate to farm machineries are exempted.
- Intra and interstate movement of trucks carrying farm machineries are exempted.
- Coffee growers who have harvested the beans should dry it up to 12-14 % moisture content and keep it in air tight containers to prevent spoilage of beans.
- Cabbage harvested may be sold in the villages itself by maintaining social distancing. Left over may be fed to pig, poultry and other livestock.
- Mushrooms which are ready for harvesting, if not sold in village may be sundried or place above chullah in appropriate drying basket till moisture content reduces to 5-8 %.
- Harvested tree beans may be preserved by making pickles or by drying the seeds along with the cover.
- Pig farmers may prepare the pig feed by using tapioca upto 35-40 % along with locally available maize floor.

## 20. Odisha

### Advisory

- Transaction of fertilizers will be made with movement of vehicles for transportation of fertilizers from rake points to godown of MARKFED,PACS,wholesale point and different registered sell points.
- Movement of pesticide and fertilizer from registered point to sale point is allowed.
- Processing of seed is allowed without disruption.
- Transportation of unprocessed seeds from farmers point to the processing unit and processed seeds from plant to sale points will continue.
- Opening of seed, fertilizer, pesticide, sale points is from 7AM to 9AM.
- Use of mask, social distancing must be maintained by the dealers and farmers.
- At sale points the POS device and the hands of farmers to be sanitized each time.

## 21. Punjab

### **Guidelines: Endst No. Agri4/2020/SPL1-30**

1. Permitting free movement of farmers and farm labour for farming operations of harvesting and sowing thereafter.
2. Free movement of farm operation machinery including harvesting machinery and transport vehicles for carrying the farm produce.
3. Permitting operation of Custom Hiring Centres to farm machinery in the cooperative and private sector.
4. Permitting sale of seeds, fertilizers, pesticides and insecticides.
5. Preparing the marketing yards for wheat arrivals.
6. Readiness of the procurement agencies for MSP operations.

\*Take necessary steps for the above-mentioned tasks keeping in mind the necessary restrictions relating to the health advisories of social distancing, use of masks, hand wash etc.

### **Advisory**

- Due of untimely rain during March, the harvesting of wheat is delayed and wheat harvesting will start after 5-10th April and peak will be between 15-30th April.
- Harvesting of wheat is through combine harvesters and their movement within state and between states has been permitted. Precautions and safety measures of workers engaged in repair, maintenance and harvesting operation is to be ensured.
- Potato crop has been harvested (>95%), only January sown potato is to be harvested (5% area). Storage, transport and marketing operations to be taken up by following safety precautions.
- About 50% mustard crop has been harvested till now which is in full swing and likely to be completed by first week of April. Social distancing is to be ensured.
- Harvesting of pulses like gram, lentil etc is delayed due to rains and harvesting is likely between 1<sup>st</sup> week to mid of April.

## 22. Rajasthan



## Advisory

- Harvesting of the matured crops and shifting to safer places  
Cattle sheds should be kept dry as far as possible. Keep goat and sheep in dry and sheds and provide green fodder, fresh and clean water three times in a day. Cattle and poultry shed must be cleaned and ventilated and provide clean drinking water 3-4 times in a day
- Drying of coriander crop after harvesting and threshing
- Manual harvesting of lodged wheat
- No need to irrigate garlic crop in which 40% bulb lets are initiated.
- Summer plowing in the harvested field of mustard for better weed and insect control. Ploughing of guava orchards is useful for pest control.
- Harvesting should be done with machine operated equipment as much as possible. Sanitize the equipment with soapy water at least 3 times a day, if manual cutting equipment is used.
- Social distancing in harvesting should be strictly followed. While harvesting, eating food, keep a distance of at least 5-6 feet from one person to another.
- Keep food utensils separately and after use clean them thoroughly with soapy water.
- Never use equipment used by one person by another person. All harvesters take their own implements.
- During the harvesting, keep your hands thoroughly clean with soapy water in between
- Clothes used during harvesting should be washed everyday.
- During harvesting, all individuals keep their separate water bottles. All harvesters to use masks.
- If a person has symptoms of cough, cold, fever, headache, body ache etc. then keep him / her away from harvesting work and immediately inform your nearest health worker. Keep sufficient quantity of water and soap available in the field during field operations.

## 23. Sikkim

**Guidelines and Advisory:** The guidelines of GoI are followed in the state. Safety measures and social distancing to followed in all agricultural operations.

- It is suggested to clean farm implements, equipment and machineries before and after use as per the safety instructions
- While going to the market area for valid reasons, farmers are asked to use face mask. Crowding to be avoided and maintenance of social distancing (1-1.5 metres) is a must. While coming back, need to change clothes and wash hands with soap water or sanitizers by following the proper method of washing.
- Safety measures to be followed while harvesting potato, cabbage, vegetable pea, their storage, transport to markets
- Farmers can contact SIMFED officials prior to harvesting in their farms for marketing of farm produce through FPOs which have been permitted to transport vegetables etc.
- Farmers can buy organic fertilizers from the fertilizer shop functioning in the local area. Farmers are advised to maintain social distancing while purchasing.
- Maize is the major crop and sowings are still continuing at some places. Farmers are advised to follow safety pre-cautions while applying organic inputs as per the recommended dose.



- Potato harvesting is in progress and farmers are advised to store required quantity standard size potato for seed purpose by following the recommended low-cost storage method.
- Farmers can also avail the cold storage facilities to store the perishables.
- Farmers are allowed to purchase livestock and poultry feeds, medicines *etc.* as and when required by following social distancing, personal hygiene measures of washing with soap, sanitizers and face mask.
- Livestock farmers are suggested for regular supplementation of mineral mixture @ 50-60 g/day/ adult cows and calcium to the lactating and pregnant cows @ 60-80 ml/day/cow to maintain productivity.
- Sikkim Milk Union Limited is offering milk price based on the Fat and SNF per cent and farmers can avail of this facility for selling morning milk.
- Dairy farmers are suggested to convert their evening collection of milk to Paneer, Butter or Ghee making for better price realization or faced with any difficulty in storage or marketing
- The livestock are needed to be fed edible tree fodders as well as chopped paddy straw regularly to sustain the milk productivity
- Maintenance of proper hygiene in livestock and poultry houses is essential.
- The litter materials in poultry shed need to be changed to prevent coccidiosis infestation. If red diarrhea symptoms are noticed in the birds, immediately administer anticoccidial drugs (in the drinking water for 3 -5 days.
- Farmers are requested to contact KVKs at district level and ICAR-NOFRI, Tadong for timely advisories related to crop management and livestock production.

## 24. Tamil Nadu

**Guidelines: D.O. Letter No.87/ APC&PS/2020 dated 24/03/2020; G.O No.232/ 27.03.2020 & G.O. No.152 of Dept of family welfare dated 23.03.2020.**

1. Farmers can sell their vegetables and fruits in the local and wholesale markets and Uzhavar sandhais which is opened in the local area without restrictions. Farmers can avail the support from Dept of Agricultural marketing and Agri business. Crowding to be avoided and isolation distance of 3 feet to be strictly adhered to.
2. Farmers to carry a copy of the D.O letter No.87/ APC&PS/2020 dated 24/03/2020 for unhindered transport of their agricultural produce to markets.
3. Restriction of movement of persons under the G.O is not applicable for farmers for selling agricultural produce in the local and wholesale markets and Uzhavar sandhais.
4. Primary processing centre under TN supply chain management will run with one AAO for farmers benefit.
5. Farmers can use the Integrated Agricultural Extension centre (IAECs) and sub AECs for purchase of Inputs for farming.
6. The seed storage, testing, processing, grading and packing facilities of government and private sectors will be running for the farmers use.
7. The seeds of all crops will be available for farmers from private seed companies for kharif season 2020. Seed companies to ensure that all seeds are available to farmers.
8. Farmers can buy the fertilizers from shops in the local area. Farmers are advised to maintain 3 feet distance while purchasing.

9. Farmers can store their produce up to 180 days in the godowns at regulated markets. Exemption towards paying rent for godowns given up to 30 days.
10. Farmers can avail 75% of the market value of the produce or up to 3 lakhs (whichever is lesser). The loan tenure is 180 days @ 5% interest rate for first 30 days
11. Farmers can also avail the cold storage facilities to store perishables
12. Movement of cattle, poultry birds, fish, eggs, meat and feed for cattle and poultry as well as the feed ingredients is permitted

### **Advisory**

- Rabi paddy is in grain filling to grain hardening stage which is to be harvested using combines. Pre-cautions and safety measures of workers engaged in repair, maintenance and harvesting operation with combiners is to be ensured.
- Groundnut and sesame crops are in maturity to harvesting stage. Manually harvesting followed by machine stripping of pods in groundnut is to be adopted by following safety measures of personal hygiene and proper cleaning of shared equipment
- Pulses in maturity to nearing harvesting stage. Manual and combine harvesting is to be done following safety measures
- Maize is in cob formation stage and measures for fall army worm management required as incidence is noticed. Need based recommended control measures to be taken up.
- Sugarcane is in vegetative stage and protection sprays/ release of bioagents against early shoot borer may be required.
- Mango in fruiting stage (marble to lemon size), fruit drop is a major issue which requires nutrient application through foliar sprays. Mixing of ingredients to be done by following safety precautions.
- Banana is in vegetative to bunching stage, tapioca at maturity stage; citrus, cashew, papaya, turmeric, water melon and vegetables (brinjal, bhendi and gourds) nearing harvest manually. Safety precautions to be followed at every step of harvesting, processing, storage, transport and marketing operations
- Spiralling whitefly is a major problem faced by coconut farmers. Recommended control measures as advised by KVKs/ SAUs to be followed. Chemical sprays to be avoided against this pest.
- Shortage of labour for farm operations is a critical concern as most of the crops are nearing harvesting stage. Use of machinery wherever feasible from custom hiring centres for harvesting is advised by following all safety measures of personal hygiene and social distancing.

## **25. Telangana**

### **Advisory**

- Paddy is in grain filling to grain hardening stage. Incidence of neck blast, stem borer and panicle mite is observed. Prevailing high relative humidity conditions are congenial for further spread of the neck blast disease and hence foliar spray of Tricyclazole @ 0.6 g or Isoprothiolane @ 1.5 ml or Kasugamycin @ 2.5 ml per litre of water is advised.

- Harvesting of paddy from substantially increased acreage during rabi is anticipated. Precautions and safety measures of workers engaged in repair, maintenance and harvesting operation with combiners is to be ensured.
- Summer green gram crop is at vegetative stage. Measures to manage whitefly incidence to be taken up to control yellow mosaic virus disease incidence
- Maize is at flowering to harvesting stage and incidence of fall army worm is noticed which is to be managed with recommended insecticidal sprays or baiting. Care to be exercised while operating threshers after harvesting of cobs.
- Chillies crop is at third to fourth picking stage, incidence of thrips and mites is noticed and safety precautions to be followed in use of spraying equipment by contract workers/ farmers
- Fruit drop is likely in Mango, nutrient spray with 1% urea or Planofix @ 1 ml per 4.5 liters of water is advised. Care to be exercised by workers while mixing of inputs and application.

## 26. Tripura

### Guidelines and Advisory

- All the markets selling essential commodities including fruits, vegetables, meat, fish and their transportation are exempted from the purview of lockdown.
- All concerned heads of offices related to R&D activities are advised to make all necessary arrangement for their livestock, research field with skeleton staff by maintaining social distancing.
- Fish growers may prepare fish feed in home by mixing mustard cake, rice polish with cooked rice.
- Potato growers finding difficulty in selling should shade dry their potatoes and store them in nearby cold storage in consultation with line department.
- All farmers are advised to maintain social distancing while doing their farm operations.
- Farm women may start preparing land for their nutritional garden as per the advice of the KVK.
- Tomato growers who are finding difficulty in selling are advised either to store them in zero energy cool chambers or prepare tomato puree/ sauce.

## 27. Uttar Pradesh

**Guidelines:** Additional Chief Secretary, Govt. Of Uttar Pradesh vide letter no 679/5-5-2020, dated 22.03.2020 (items 1 to 3); Govt of UP vide letter 438/PS/2019-20, dated 27 March, 2020 (by State Directorate of Horticulture and Food Processing department, items 4 to 9),

1. All the wholesale and retail shops of fertilizers, seeds and plant protection chemical shall remained open as usual and their production and supply shall continue through road and train. For loading and unloading of chemical fertilizers at railway reck, the concerned labourer shall be exempted.
2. Use of combine harvester and the related laborer shall be permitted for harvesting of rabi wheat.

3. Labour used in operation and handling of seed processing machines are exempted.
4. Keeping in mind the COVID 19, the lockdown shall not be applicable to following with respect to horticultural crops.
5. For cold storing purpose, transportation, loading and unloading of fruits, vegetable, mushrooms, honey etc are permitted.
6. For plucking, digging, grading and loading and unloading of fruits and vegetables in field, the related labourers are exempted.
7. The daily workers and class IV staff of Govt. farm, nursery, seed production farm, center of excellence are exempted.
8. The migration of honey box from one place to another and extraction of Honey is allowed during this period.
9. The essential inputs required at the field as well as cold stores like fertilizer, plant protection chemicals, packaging materials, gas used in cold stores, fumigation in the cold storage etc are permitted during this period.

### **Advisory**

- Where wheat is lodged, harvesting should be done manually. The manual cutting equipment should be sanitized before and after use
- In case of normal crop, wheat harvesting may be done with the use of combine harvester. During harvesting social distancing should be strictly followed and only the essential person (s) may be allowed in this operation.
- In Mango orchards infestation of thrips can be controlled by application of insecticide thiomethoxam @0.30 g/l
- Powdery mildew in mango can be controlled with application of hexaconozol @0.1 ml/l or trifloxystrobin 0.5 g/l
- Follow shade drying of leafy vegetables and spices
- During harvesting keep hands thoroughly cleaned with soapy water
- Where harvesting is over, deep ploughing is advised
- In case of manual field operations of harvesting/ picking, accomplish the operation in 4-5 feet spaced strips assigning one strip to one person. This will ensure adequate spacing between the engaged labour
- Stagger the field operations wherever possible and avoid engaging more number of persons on the same day.
- Prefer mechanized operations over the manual wherever feasible. Only the essential numbers of persons should be allowed to accompany the machine.
- All machines should be sanitized at the entry point and at regular intervals. All transport vehicles, gunny bags or other packaging material should also be sanitized
- The collection of the produce may be done in small heaps spaced at 3-4 feet and field level processing should be assigned to 1-2 persons/heap to avoid crowding.
- Proper sanitation and cleanliness of threshers for harvested maize and groundnut is to be maintained especially when machines are shared and used by farmer groups. Copious washing of machine parts frequently touched with soap is advised.

- Harvesting, grading and packaging of seed potatoes to be done carefully following personal safety and social distancing. While doing their transportation, loading and unloading to col sores/ware houses, utmost care to be taken to avoid any chance of COVID 19 infection.
- While doing the cultural operations and harvesting, cleaning etc of seasonal vegetables and cucurbits, workers should do the operation singly and in staggered patches
- Summer planting of sugarcane shall start in the state shortly. To the maximum possible extent, machinery to be used for planting.
- Likewise, sowing of summer maize, summer groundnut, hybrid pearl millets and summer mung bean to be done taking all care so that this deadly disease may not spread.
- Mentha is another promising crop in the state. Only the improved variety cuttings to be used and nutrient management as well as irrigation to be managed suitably.

## 28. Uttarakhand

### **Guidelines: No. 288/XVI-1/20/05 (28)/2014 dated 28<sup>th</sup> March 2020**

1. Vehicles and labours involved in loading and unloading of migration of beekeepers and bee colonies and sale of mushroom in the state.
2. Vehicles and labours involved in transportation of all insecticides-pesticides chemicals and turmeric and ginger.
3. Vehicles and labours/workers involved in mobile horticulture centre established in the state and essential operations of Government Horticultural activities.
4. Vehicles, Government Officials and contractor involved in auction of produce of Government orchards.

### **Advisory**

- Wheat crop is still in reproductive stage and harvesting will start by the 2nd week of April and continued till end by April. Precautions with respect to social distancing and hygiene should be followed at the time of harvesting.

## 29. West Bengal

### **Advisory**

- People engaged in ongoing agriculture operations are exempted from restrictions.
- Manufacturing units for packaging materials of food items are exempted from restrictions.
- Shops of seeds and pesticides maybe opened.
- Movement of forest sector will be treated as essential services.
- Movement of essential food commodities via road is exempted.
- Establishments earmarked for quarantine facilities will be exempted.
- Cold storage and warehousing service will be operational.
- Transportation of vegetables, fruits, meat, fish, milk, eggs, poultry feed, cattle feed, storage are exempted during lockdown period
- Unrestricted movement of all essential commodities including fish, fish seed and fish products and personnel related to these activities has been allowed.

- All DDFs, ADFs to ensure that fishing activities in their area are stepped up and they may interact with all the stakeholders for this purpose
- Telephonic networks with fishermen, cooperatives, associations will be operationalized to ensure that their problems are addressed