



## तमिलनाडु के लिए राज्य स्तरीय समग्र कृषि-मौसम परामर्श बुलेटिन



### **State Composite Agro-meteorological Advisory Bulletin for Tamil Nadu and Puducherry Bulletin No. 027/2024**

For the period 0830 IST, 02<sup>nd</sup> April 2024 to

0830 IST, 07<sup>th</sup> April 2024

**Issued on Tuesday, 02<sup>nd</sup> April 2024**

Issued by

DDGM, Regional Meteorological Centre, India Meteorological Department,  
Chennai in collaboration with TNAU and nine AMFU's of Agro climatic Zones of  
the Tamil Nadu state

## Agro climatic zones of the state

Sl. No	Agro climatic zone	Districts	Agro met field Unit (AMFU) location
1	Northeastern zone	Kanchipuram, Tiruvallur, Cuddalore Tiruvannamalai, Chennai, Villupuram , Vellore	Chennai
2	Northwestern zone	Dharmapuri, Krishnagiri, Salem and Namakkal	Namakkal
3	Western Zone	Erode, Tiruppur and Coimbatore,	Coimbatore,
4	Cauvery Delta zone	Thanjavur, Nagapattinam, Tiruvarur, Karur, Perambalur, Ariyalur and Tiruchirapalli.	Adudurai
5	Southern zone	Virudhunagar, Tirunelveli and Thoothukudi	Kovilpatti
6	South Zone	Pudukkottai, Madurai, Dindigul, Theni, Ramanathapuram and Sivagangai	Kannivadi
7	High rainfall zone	Kanyakumari	Pechiparai
8	Hilly zone	Nilgiris	Ooty
9	Coastal Zone	Karaikal and Pondicherry	Karaikal



**Past Weather Summary for the period 28.03.24 to 01.04.24 for the State of Tamilnadu & Puducherry**

**Temperature:**

Maximum Temperature of range **33°C – 40°C** prevailed over the state. Kodaikanal and Uthagamandalam recorded Maximum temperature range **20°C – 27°C** during the period.

Minimum temperature of range **21°C - 28°C** prevailed over the State. Kodaikanal and Uthagamandalam recorded Minimum temperature of range **10°C - 13°C** during the same period.

**Spatial distribution of Rainfall**

Spatial distribution of Rainfall	Tamil Nadu	Puducherry
Widespread (Most places)	--	--
Fairly widespread (Many places)	--	--
Scattered (Few Places)	--	--
Isolated (One or Two Places)	28.03.24, 29.03.24, 30.03.24 & 01.04.24	--
Dry	31.03.24	28.03.24 to 01.04.24

**Chief Amounts of Rainfall (in cms):-**

**28.03.24** : Ramanathapuram (dist Ramanathapuram) 1.

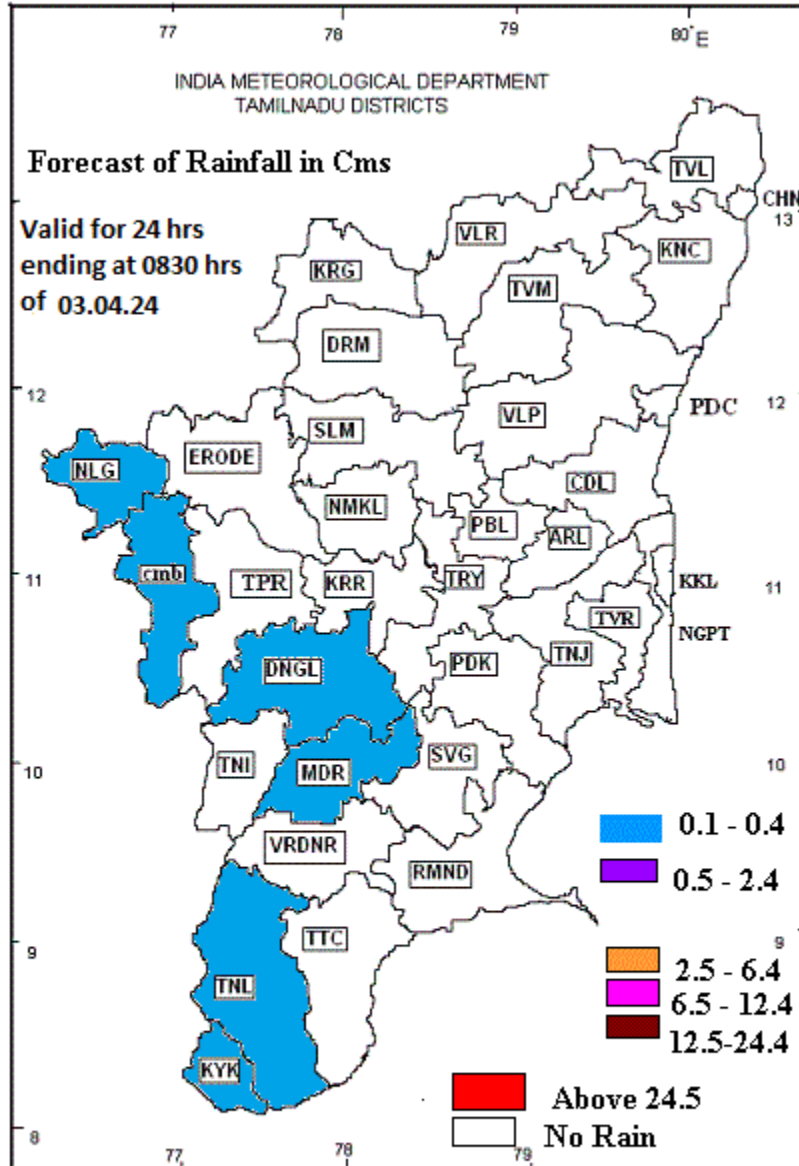
**29.03.24** : Tuticorin (dist Thoothukudi) 4, Kayalpattinam (dist Thoothukudi) 3, Kanniyakumari (dist Kanniyakumari) 1, Karuppanadhi Dam (dist Tenkasi) 1

**30.03.24** : Eraniel (dist Kanyakumari) 2 and Colachel (dist Kanyakumari) 1.

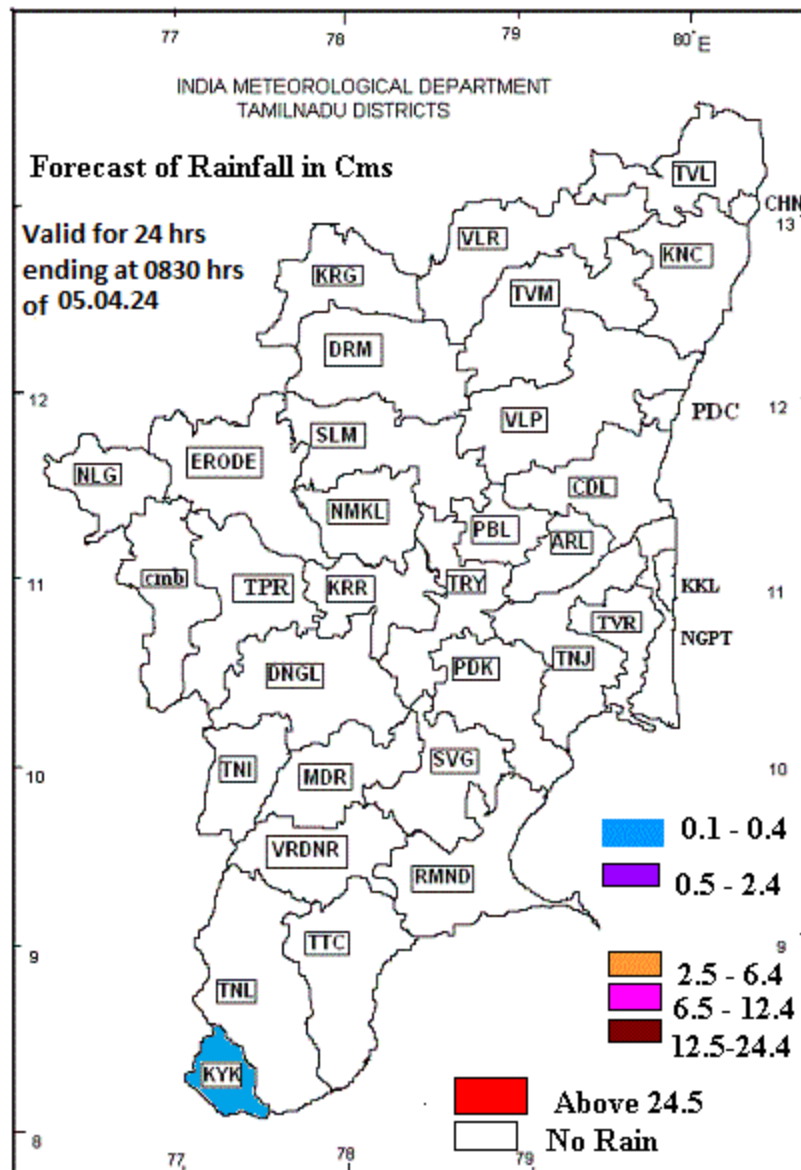
**31.03.24** : Nil

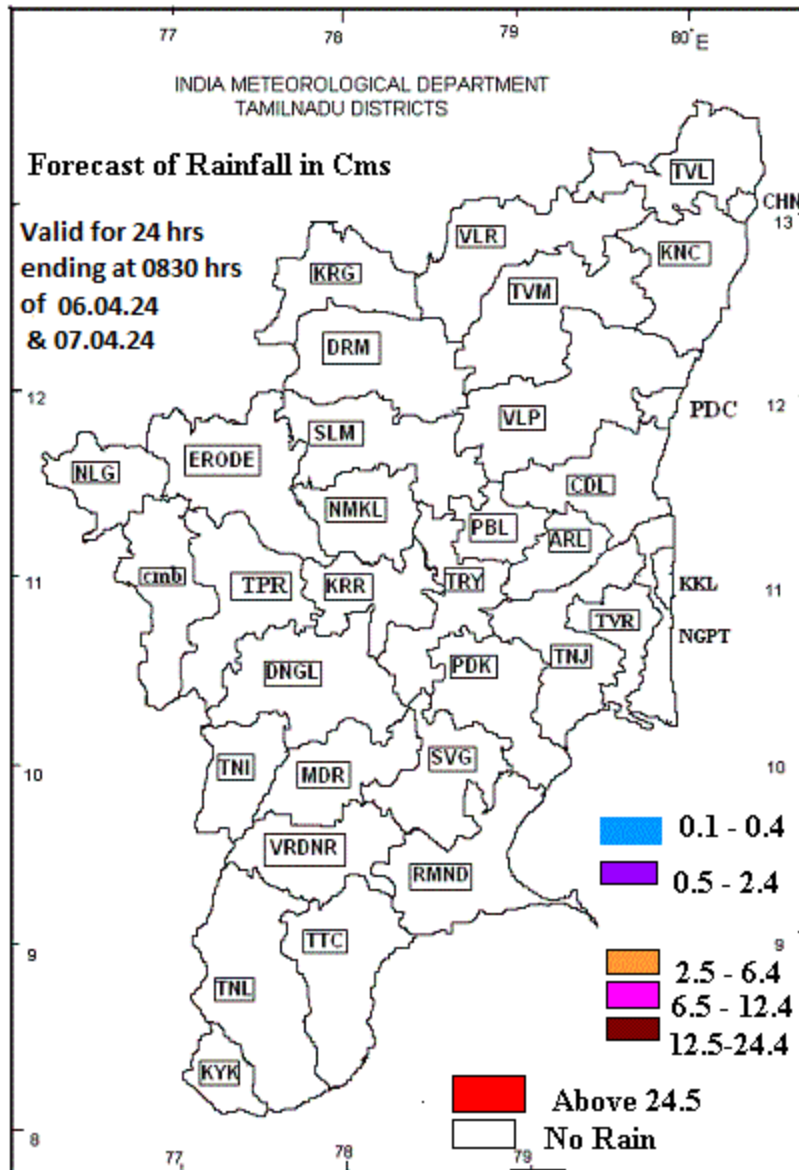
**01.04.24** : Eraniel (dist Kanyakumari) 2 and Colachel (dist Kanyakumari) 1.

**DISTRICT LEVEL ENSEMBLE WEATHER FORECAST ISSUED ON: 02.04.24  
VALID FOR THE NEXT 5 DAYS**











## District-wise Agromet Advisories

### **Chennai, Kancheepuram, Villupuram, Tiruvannamalai, Tiruvallur, Vellore and Cuddalore**

#### SMS Advisory:

(03.04.2024-07.04.2024) Maximum temperature is likely to be 2-3°C above normal at a few places over Tamilnadu.

#### Livestock Advisory:

- 1.Livestock must be given medicated bath to avoid ectoparasite infestation. Moreover dipping Must be done on a sunny day.
- 2.Scabies affected rabbits must be isolated and treated. The cage must be disinfected with flame gun.
- 3.The surplus fodder available must be preserved as silage for summer feeding.
- 4.Newly born piglets must be protected from cold drafts
- 5.The livestock must be provided in clean wholesome drinking water
- 6.To prevent the methane and ammonia accumulation in pig sty provision of proper ventilation is necessary.
- 7.To prevent water stagnation proper drainage must be provided in livestock shelter.
- 8.The chicks must be given artificial heat (1 watt / chick or coal brooder for every 200 chicks for first 2 weeks of age).
- 9.Add 5%shell grit in laying hens for optimum egg production.
- 10.Plantation of trees around the livestock shed not only enhances ventilation but also prevent heat stress particularly dairy cattle.

#### Agricultural advisory

##### Rice:

To control leaf folder, spray chlorantraniliprole 18.5% SC @ 6mg per 10 litre of water. Spray 1% PPFM and incorporate the multiplied azolla insitu in the field for decomposition to release nitrogen.

Due to prevailing weather condition chances of thrips infestation in paddy field. To control spray thiamethoxam 25% WG 100 g/ha or dimethoate 1.5ml/l. Due to prevailing weather condition leaf folder and stem borer infestation is found in paddy crop. To manage them, spray carbosulfan 400 ml/ac or cartap hydrochloride 600 g/ac during morning or evening hours.

##### Groundnut:

There are possibilities of early leaf spot infestation in groundnut. For management farmers are advised to spray Carbendazim 500 g/ha.

##### Banana:

To control wilt in banana, apply Bacillus subtilis and Trichoderma viride @ 2.5 kg/ha. or drenching with Bacillus subtilis 5 ml/litre. To overcome micro nutrient deficiency and to improve quality of banana fruit micronutrient plays a major role. Micro nutrient can be sprayed at 3,5 and 7 months after planting of banana.

##### Coconut:

Apply coconut husks with convex surface facing upwards (100 Nos.) or dried coconut leaves (15 Nos) or coir pith up to a height of 10 cm in the basin of 1.8 m radius around the palms as mulch for soil moisture conservation particularly during summer season. Husk burial can be done in coconut basins or in the interspaces to overcome drought and button shedding. Bury husks @ 100 Nos. with concave surface facing upwards or 25 kg of coir pith /palm in circular trenches, dug 30 cm width and 60 cm depth at 1.5 meters radius.

Installation of yellow sticky traps on the palm trunk to trap the adult whiteflies.

Encourage buildup of parasitoids (*Encarsia* sp.) and reintroduce parasitized pupae of emerging zones of whitefly outbreak. In severe case, spray neem oil 10 ml/lit of water or spray azadirachtin 2.0 ml/lit of water with 1.0 ml of sticking agent.

In coconut there are possibilities of Rugose Spiraling whitefly infestation. For management farmers are advised to take up spray of Neem oil @ 3% .

## Coimbatore

### Agro Advisory

Crop	Stage	Advisory
General		Dry days with clear sky is expected during next week with wind speed of 6-12 km/hr in western zone districts. The temperature may be increased 1-2°C from the normal. Interior districts may get maximum temperature of >39°C. Irrigation may be done based on soil moisture and apply crop residue mulches to all irrigated crops to maintain sufficient soil moisture. In case of limited irrigation water, dust mulch (top layer to a depth of 2-3cm may be stirred well) to avoid moisture stress condition.
Cumbu		Considering the dry weather, land preparation may be done to sow irrigated bajra during first week of April.
Vegetables	Vegetative	Since temperature starts increasing sucking pest like leaf minor, jassids may be increased. Hence spray 5% neem seed kernel extract as prophylactic spray.
Banana		Considering the high maximum and minimum temperature and reduced evening relative humidity converged local wind may occur between 2 to 3 pm. Provide propping to the banana of more than five months old.
Coconut		Summer rains during next two months may be harvested in root zone of coconut by deepening the tree basin with inward slopes. Till then, ensure to provide 100 liters of water per tree per day to maintain the productivity.
Animal Husbandry		Increasing temperature and decreasing relative humidity may cause discomfort to the animals. Hence, provide clean water to both animals and poultry. Hang wet gunny bags around the animal shed to reduce the temperature. Do not allow animals for grazing during mid day.

### SMS advisory

The temperature may be increased 1-2°C from the normal. Interior districts may get maximum temperature of >39°C. Protect animal from heat stress.

## Erode

### Agro Advisory

Crop	Stage	Advisory
General		Dry days with clear sky is expected during next week with wind speed of 6-12 km/hr in western zone districts. The temperature may be increased 1-2°C from the normal. Interior districts may get maximum temperature of >39°C.

		Irrigation may be done based on soil moisture and apply crop residue mulches to all irrigated crops to maintain sufficient soil moisture. In case of limited irrigation water, dust mulch (top layer to a depth of 2-3cm may be stirred well) to avoid moisture stress condition.
Cumbu		Considering the dry weather, land preparation may be done to sow irrigated bajra during first week of April.
Vegetables	Vegetative	Since temperature starts increasing sucking pest like leaf minor, jassids may be increased. Hence spray 5% neem seed kernel extract as prophylactic spray.
Banana		Considering the high maximum and minimum temperature and reduced evening relative humidity converged local wind may occur between 2 to 3 pm. Provide propping to the banana of more than five months old.
Tapioca		Prevailing hot weather is favourable for spiraling white fly in tapioca and if require spray Triazophos @ 2 ml or Acephate @ 2 gm per litre of water
Coconut		Summer rains during next two months may be harvested in root zone of coconut by deepening the tree basin with inward slopes. Till then, ensure to provide 100 liters of water per tree per day to maintain the productivity.
Jasmine		Prevailing weather condition is favourable for mite attack in jasmine and tapioca hence farmers are requested to monitor the crop if require spray wettable sulphur @ 2.5 g or dicofol @ 2 ml per liter of water
Animal Husbandry		Increasing temperature and decreasing relative humidity may cause discomfort to the animals. Hence, provide clean water to both animals and poultry. Hang wet gunny bags around the animal shed to reduce the temperature. Do not allow animals for grazing during mid day.

#### SMS advisory

The temperature may be increased 1-2°C from the normal. Interior districts may get maximum temperature of >39°C. Protect animal from heat stress.

## Tiruppur

#### Agro Advisory

Crop	Stage	Advisory
General		Dry days with clear sky is expected during next week with wind speed of 6-12 km/hr in western zone districts. The temperature may be increased 1-2oC from the normal. Interior districts may get maximum temperature of >39oC. Irrigation may be done based on soil moisture and apply crop residue mulches to all irrigated crops to maintain sufficient soil moisture. In case of limited irrigation water, dust mulch (top layer to a depth of 2-3cm may be stirred well) to avoid moisture stress condition.
Coconut		Summer rains during next two months may be harvested in root zone of coconut by deepening the tree basin with inward slopes. Till then, ensure to provide 100 liters of water per tree per day to maintain the productivity.
Jasmine		Prevailing weather condition is favourable for mite attack in jasmine and tapioca hence farmers are requested to monitor the crop if require spray

		wettable sulphur @ 2.5 g or dicofol @ 2 ml per liter of water
Animal Husbandry		Increasing temperature and decreasing relative humidity may cause discomfort to the animals. Hence, provide clean water to both animals and poultry. Hang wet gunny bags around the animal shed to reduce the temperature. Do not allow animals for grazing during mid day.

#### SMS advisory

The temperature may be increased 1-2oC from the normal. Interior districts may get maximum temperature of >39oC. Protect animal from heat stress.

## Nilgiris

Very light rainfall is expected for first two day hence farmers are requested to take up the sowing of hilly vegetables. Seeds can be treated with Trichoderma viride @ 4g/kg or Bacillus subtilis @ 10g/kg to manage seed and soil borne pathogens. Further, soil testing has to be done before any cropping programme. Foliar application of water-soluble micronutrient mixture @ 0.5 g/liter of water during 30, 45 and 60 days after planting may be done to increase the Garlic bulb yield.

Horticulture (Stage)	Horticulture Specific Advisory
CARROT (Vegetative )	For the management of nematode in carrot, soil application of neem cake @ 1 ton/ha at planting. Biofumigation of mustard plants followed by application of neem cake @ 250kg/ha along with Purpureocillium lilacinum @ 5kg/ha is recommended.
BITTER GOURD (Vegetative )	To manage aphids and jassids in bitter gourd, foliar application of imidacloprid 70 WG 1.0g/10lit. is recommended.
Horticulture (Stage)	Horticulture Specific Advisory
TEA (Vegetative )	To manage mites in tea crop, foliar application of Azadirachtin 1.0% EC (neem based) 2.0 ml/lit or propargite 57 % EC 2.0 ml/lit is recommended.

## Ariyalur, Karur, Nagapattinam, Perambalur, Thanjavur, Tiruvarur and Tiruchirapalli

#### Agro Advisory

Crop	Stage	Advisory
General		Farmers can utilize the mobile apps viz., (TNAU AAS, Meghdoot and DAMINI), for more updated weather information.
Black gram	Sowing	ADT 5 black gram variety is suitable for summer season under irrigated condition.
Cotton		In rice fallow cotton, one hand weeding has to be given on 45 DAS. After 3 days of weeding top dressing fertilizer can be done along with earthing up.
Cattle	Cow	Due to increase in day temperature avoid animal grazing in hot hours of the day.

#### SMS advisory

ADT 5 black gram variety is suitable for summer season under irrigated condition.

## Dindigul

SMS Advisory	Chances of very light rain on 3 Apr. Maximum temperature would be in the range of 38°C to 39°C and the minimum temperature would be between 26°C - 27°C. Partly cloudy sky will appear for the next five days. Wind is expected with the speed of 6-10 Kmph from, Southeast & East directions.
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General Advisory:

Livestock:

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 37°C to 39°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

Agriculture:

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.

Weather Based Agro-Advisories: (Tomato, Cluster beans & Animal Husbandry).

Tomato:

The incidence of the white fly noticed in Tomato. The symptom appears on the leaves with Chlorotic spots, leaves are yellowing, downward curling, and drying of leaves.

To control, spray Acetamiprid @ 6gm + sticky agent 10ml with 10 litres of water.

Cluster beans:

The occurrence of Aphids noticed in Cluster beans. Nymphs and adults suck the sap of leaves.

It leads to leaf wilting, flower dropping and growth of the plants also hindered.

To control, spray Acephate @ 40gm + sticky agent @ 10ml with 10litres of water.

Animal Husbandry:

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## Madurai

SMS Advisory Chances of very light rain on 3 Apr. Maximum temperature would be in the range of 38°C to 39°C and the minimum temperature would be between 26°C - 27°C. Partly cloudy sky will appear for the next five days. Wind is expected with the speed of 8-10 Kmph from, Southeast direction.

General Advisory:

Livestock:

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 37°C to 39°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

**Agriculture:**

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.

**Weather Based Agro-Advisories: (Sugarcane, Banana & Animal Husbandry).**

**Sugarcane:**

Micronutrient deficiency symptoms may be noticed in sugarcane crops.

To alleviate the micronutrient deficiency as well as to improve the yield of ratoon sugarcane, foliar spraying of Sugarcane booster @ 1kg/acre at the time of 45 days after planting, and 1.5kg/acre at the time of 60 days after planting and @ 2kg/acre at the time of 75 days after planting is recommended. Mix the booster with 200 liters of water along with the sticking agent.

**Banana:**

To increase the yield in Bananas crop, farmers are advised to go with a foliar spray of Banana Shakthi @ 20 grams/litre of water along with lemon juice.

Spraying can be given during the 3rd, 5th and 7th months after planting.

**Animal Husbandry:**

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## **Pudukottai**

**SMS Advisory** Dry weather will prevail for the next 5 days. Maximum temperature would be in the range of 39°C to 40°C and the minimum temperature would be between 26°C - 27°C. Mainly clear sky will appear for the next five days. Wind is expected with the speed of 14-16 Kmph from, Southeast direction.

**General Advisory:**

**Livestock:**

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 34°C to 37°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

**Agriculture:**

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised

to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.

Wind with the speed of 14 to 16 kmphs expected for the next five days. Hence farmers are advised to provide propping in sugarcane and to provide adequate support for crops like Banana, Papaya, Guava and Moringa, to prevent from lodging. For Gourds check the structures /pandhals for damages in the strings and poles and provide adequate support. Postpone the spraying activity.

Weather Based Agro-Advisories: (Tapioca, Brinjal& Animal Husbandry).

Tapioca:

The Symptom of micronutrient deficiency noticed in Tapioca fields. Leaves turning into pale yellow color is the symptom of that.

Hence, farmers are advised to go with the foliar spray of micronutrient "Tapioca special" @ 5ml/litre of water during the morning or evening hours.

Brinjal:

The incidence of sucking pests like leaf hoppers, Thrips, whitefly, and spiraling whitefly may be noticed in the Horticultural crop fields.

Hence, farmers are advised to monitor the sucking pests by installing yellow sticky traps @ 5 Nos./acre.

For severe infestation, spray any one of the following, Neem Seed Kernel Extract @ 50g/lit. of water or Neem oil @ 30ml per litre of water.

Animal Husbandry:

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## Ramanathapuram

SMS Advisory Dry weather will prevail for the next 5 days. Maximum temperature would be in the range of 36°C to 37°C and the minimum temperature would be between 26°C - 27°C. Partly cloudy sky will appear for the next five days. Wind is expected with the speed of 18-20 Kmph from, South direction.

General Advisory:

Livestock:

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 34°C to 37°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

Agriculture:

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.



Wind with the speed of 18 to 20 kmph is expected for the next five days. Hence farmers are advised to provide propping in sugarcane and to provide adequate support for crops like Banana, Papaya, Guava and Moringa, to prevent from lodging. For Gourds check the structures /pandhals for damages in the strings and poles and provide adequate support. Postpone the spraying activity.

Weather Based Agro-Advisories: (Coconut, Tomato & Animal Husbandry).

Coconut:

The incidence of Mealy Bug is noticed in Coconut. Mealybugs colonize on all the tender plant parts like bases of spear leaf, spadix, and inflorescence and beneath the perianth of the nut. As a result, the leaves become highly stunted, suppressed, deformed, and present a crinkled appearance.

Mealybugs infest the unopened heartleaf and inflorescence. It feeds plant sap. Leaves are yellowing and dry up. Button mealy bugs colonize under the perianth lobes of tender nuts. Infested nuts harbouring gravid mealy bugs remain on the spadix, which serves as inoculum for further spread.

Remove leaflets harbouring these insects and destroy them.

To manage the mealy bug spray Neem Oil @ 1 litre per acre with sticky agent @ 100ml/acre.

Tomato:

To get an increase in yield in the Tomato crop, top dressing of Urea @ 325kg per hectare and MOP @ 250 kg per hectare in three equal splits on the 30th, 45th, and 60th days after planting, is recommended.

Animal Husbandry:

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## Sivagangai

SMS Advisory Dry weather will prevail for the next 5 days. Maximum temperature would be in the range of 38°C to 39°C and the minimum temperature would be between 26°C - 27°C. Partly cloudy sky will appear for the next five days. Wind is expected with the speed of 14-16 Kmph from, Southeast & South directions.

General Advisory:

Livestock:

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 37°C to 39°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

Agriculture:

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.



Wind with the speed of 14 to 16 kmph is expected for the next five days. Hence farmers are advised to provide propping in sugarcane and to provide adequate support for crops like Banana, Papaya, Guava and Moringa, to prevent from lodging. For Gourds check the structures /pandhals for damages in the strings and poles and provide adequate support. Postpone the spraying activity.

Weather Based Agro – Advisories: (Important Crops: Banana, Chilly & Animal Husbandry)

Brinjal:

The incidence of Fusarium wilt disease noticed in Banana. The first obvious signs of the disease in most of the varieties are wilting, a light yellow colouring of the lower leaves, most prominent around the margins, they eventually turn into bright yellow colour with dead leaf margins.

To avoid this, follow the crop rotation practices .

To control this, apply 2kg of Farm yard manure + Trichoderma viride @ 40gm + Pseudomonas @ 40gm + Neem Cake @ 200gm, mix thoroughly, and apply ½ a foot away from the root portion of the suckers.

Chilly:

The occurrence of root-knot nematodes and reniform nematodes was noticed in vegetable crops. The nematode-infested field shows day wilting symptoms and also galls in the root.

Farmers are advised to apply neem cake @ 400kg/ha and intercrop with marigold and also,

Apply Purpureocillium lilacinum @ 2½ kg/ha mixed with 100 kg of FYM.

Animal Husbandry:

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## Theni

SMS Advisory Dry weather will prevail for the next 5 days, Maximum temperature would be in the range of 32°C to 33°C and the minimum temperature would be between 21°C - 22°C. Partly cloudy sky will appear for the next five days. Wind is expected with the speed of 6-8 Kmph from, Northeast & Southeast directions.

General Advisory:

Livestock:

Maximum temperatures is likely to be 2 - 3°C above normal at a few pockets and are likely to be in the range of 37°C to 39°C, over the district from 03rd to 07th April 2024.

For livestock, the heat stress can be managed by spraying/ sprinkling water directly on the body of animals for a period of 1 to 5 minutes at an interval of 30-60 minutes. Cover the sides of the cow shed with wet gunny bags. Ensure the increased mineral supplementation to the animals during hot weather to meet the increased demand for minerals. The potassium-rich mineral mixture should be preferred for your cattle.

Agriculture:

For the next five days (03.04.2024 to 07.04.2024), due to the increase in maximum temperature, there are chances of the heatwave, likely to occur in isolated places of Tamil Nadu. Hence farmers are advised to plan their field activities during morning and evening hours and avoid working in the field during 12 noon to 4 Pm. Stay safe and take care. Drink adequate water.

Weather Based Agro-Advisories: (Coconut, Sugarcane & Animal Husbandry)

Coconut: During the summer season, mulching technology can be practiced in Coconut grooves to reduce water evaporation.

Apply the coconut husks (100 Nos.) with the convex surface facing upwards or dried coconut leaves (15 Nos) or coir pith up to a height of 10 cm in the basin of a 1.8-metre radius around the palms as mulch for soil moisture conservation.

Sugarcane:

During hot weather conditions, water management is more important in sugarcane cultivation.

Before planting, soak the setts in lime solution (80 kg Kiln lime in 400-litre water) for one hour.

Plant in deep furrows of 30 cm depth.

During the moisture stress period, spray potash and urea each @ 2½ % (15 litres of water) at 15-day intervals.

Alternate furrow and skip furrow methods are more beneficial under water scarcity conditions.

Animal Husbandry:

Due to the hot weather conditions, the feed intake by chicks will be decreased, to rectify this increase the amount of amino acids, and mineral mixture with the chick feed.

During the summer season, the eggshells are also much thinner than usual. To avoid this, put a large amount of oyster on plates and always make it available for the layer birds.

The number of water tanks should be increased than usual (ie. 20% to 30%). To reduce the dehydration process, add more minerals to the water.

## Virudhunagar

Crop	Stage	Agromet Advisory
Irrigated crops	Water management	No rainfall is predicted for next five days. Farmers are advised to irrigate the crop and fertilizer application
Rainfed / irrigated crops	Plant protection	Spraying maybe practiced. Usage of bioproducts may be practiced for plant protection to avoid scorching effect.
Paddy	Vegetative stage	Farmers are advised to irrigate the crop. Advised to apply the fertilizer.
Pulses (Black gram/ green gram)		
Livestock	Temperature	Adults couldn't withstand the high temperature, to reduce the heat load usage of water sprinklers or misters can be useful to reduce temperature.
Human		Heat gain in the human body result to cascade of illnesses, including heat cramps, heat exhaustion, heatstroke, and hyperthermia. So requested to drink some water or fruit juice to rehydrate.

SMS: Rain: Nil. Irrigate and proceed with application of fertilizer. Application of bioproducts for plant protection to avoid scorching. Human and animals - Heat stress- intake of water frequently.

Tamil Nadu		
Yesterday's trough/wind discontinuity from south Tamil Nadu to southeast Madhya Pradesh now runs from south Tamil Nadu to east Vidarbha across interior Karnataka & Marathwada at 0.9 km above mean sea level		
Weather forecast	Next five days	Light to Moderate rain with thunderstorm & lightning is likely to occur at one or two places over South Tamilnadu and Western Ghats districts of North Tamilnadu on Day 1 (03.04.2024). Dry weather is very likely to prevail over rest Tamilnadu, Puducherry & Karaikal area on Day 1 (03.04.2024).

		<p>Light to Moderate rain is likely to occur at one or two places over South Tamilnadu, Western Ghats districts of North Tamilnadu, Delta districts and Karaikal area on Day 2 (04.04.2024).</p> <p>Dry weather is very likely to prevail over rest Tamilnadu and Puducherry on Day 2 (04.04.2024).</p> <p>Dry weather is very likely to prevail over Tamilnadu, Puducherry &amp; Karaikal area from Day 3 (05.04.2024) to Day 5 (07.04.2024).</p>
Extended range weather forecast		<p>Week (05-04-2024 to 11-04-2024): Slightly below normal rainfall is likely over the southern and the delta districts and Karaikal area and generally dry weather condition is likely over rest of Tamilnadu and Puducherry.</p>

## Tirunelveli

Crop	Stage	Agromet Advisory
Irrigated crops	Water management	Light rainfall is predicted on day 1 (03.04.2024). Farmers are request to Irrigate.
rainfed / irrigated crops	Plant protection	Spraying maybe practiced. Usage of bioproducts may be practiced for plant protection to avoid scorching effect.
Paddy	Booting stage	Avoid excessive use of nitrogen and control irrigation by alternate wetting and drying to control Brown plant leafhopper.
Livestock	Temperature	Adults couldn't withstand the high temperature, to reduce the heat load usage of water sprinklers or misters can be useful to reduce temperature.
Human		Heat gain in the human body result to cascade of illnesses, including heat cramps, heat exhaustion, heatstroke, and hyperthermia. So requested to drink some water or fruit juice to rehydrate.

SMS: Rain: 03.04-3mm. Irrigate and proceed with application of fertilizer. Application of bioproducts for plant protection to avoid scorching. Paddy - Avoid excessive use of nitrogen and control irrigation to control Brown plant leafhopper.

Tamil Nadu		
Yesterday's trough/wind discontinuity from south Tamil Nadu to southeast Madhya Pradesh now runs from south Tamil Nadu to east Vidarbha across interior Karnataka & Marathwada at 0.9 km above mean sea level		
Weather forecast	Next five days	<p>Light to Moderate rain with thunderstorm &amp; lightning is likely to occur at one or two places over South Tamilnadu and Western Ghats districts of North Tamilnadu on Day 1 (03.04.2024).</p> <p>Dry weather is very likely to prevail over rest Tamilnadu, Puducherry &amp; Karaikal area on Day 1 (03.04.2024).</p> <p>Light to Moderate rain is likely to occur at one or two places over South Tamilnadu, Western Ghats districts of North Tamilnadu, Delta districts and Karaikal area on Day 2 (04.04.2024).</p> <p>Dry weather is very likely to prevail over rest Tamilnadu and Puducherry on Day 2 (04.04.2024).</p> <p>Dry weather is very likely to prevail over Tamilnadu, Puducherry &amp; Karaikal area from Day 3 (05.04.2024) to Day 5 (07.04.2024).</p>
Extended range weather forecast		<p>Week (05-04-2024 to 11-04-2024): Slightly below normal rainfall is likely over the southern and the delta districts and Karaikal area and generally dry weather condition is likely over rest of Tamilnadu and Puducherry.</p>

## Thoothukudi

Crop	Stage	Agromet Advisory
Irrigated crops	Water management	No rainfall is predicted for next five days. Farmers are advised to irrigate the crop and fertilizer application
Plant protection	Plant protection	Spraying maybe practiced. Usage of bioproducts may be practiced for plant protection to avoid scorching effect.
Paddy	Tillering stage	Farmers are advised to irrigate the crop. Advised to apply the fertilizer. Avoid excessive use of nitrogen and control irrigation by alternate wetting and drying to control Brown plant leafhopper.
Livestock	Diseases forecast for the month of April	Peste des petits ruminants -goat and sheep-very high risk- Preventive Measures: Vaccination of susceptible animals of above 3 months old age. Restriction on animal movement, strict biosecurity measures and proper disposal of carcass.
	Temperature	Adults couldn't withstand the high temperature, to reduce the heat load usage of water sprinklers or misters can be useful to reduce temperature.
Human	Temperature	Heat gain in the human body result to cascade of illnesses, including heat cramps, heat exhaustion, heatstroke, and hyperthermia. So requested to drink some water or fruit juice to rehydrate.

SMS: Rain: Nil. Irrigate and proceed with application of fertilizer. Application of bioproducts for plant protection to avoid scorching. Paddy - Avoid excessive use of nitrogen & control irrigation to avoid Brown plant leafhopper.

Tamil Nadu		
Yesterday's trough/wind discontinuity from south Tamil Nadu to southeast Madhya Pradesh now runs from south Tamil Nadu to east Vidarbha across interior Karnataka & Marathwada at 0.9 km above mean sea level		
Weather forecast	Next five days	Light to Moderate rain with thunderstorm & lightning is likely to occur at one or two places over South Tamilnadu and Western Ghats districts of North Tamilnadu on Day 1 (03.04.2024). Dry weather is very likely to prevail over rest Tamilnadu, Puducherry & Karaikal area on Day 1 (03.04.2024). Light to Moderate rain is likely to occur at one or two places over South Tamilnadu, Western Ghats districts of North Tamilnadu, Delta districts and Karaikal area on Day 2 (04.04.2024). Dry weather is very likely to prevail over rest Tamilnadu and Puducherry on Day 2 (04.04.2024). Dry weather is very likely to prevail over Tamilnadu, Puducherry & Karaikal area from Day 3 (05.04.2024) to Day 5 (07.04.2024).
Extended range weather forecast		Week (05-04-2024 to 11-04-2024): Slightly below normal rainfall is likely over the southern and the delta districts and Karaikal area and generally dry weather condition is likely over rest of Tamilnadu and Puducherry.

## Kanyakumari

### AGRO ADVISORIES:

S. N.	CROP	STAGES	ADVISORIES
1.	Fruit trees and Tree spices	All stages	Strengthening the basins may be taken up for better harvesting of rains.
2.	Horticultural crops.	All stages	Basins can be formed for all tree crops and coir compost should be applied to conserve moisture in banana, pepper, clove, nutmeg, cinnamon and coconut.
3.	Pepper	All stages	Pepper rooted cuttings can be planted if there is sufficient soil moisture.
4.	Pineapple	Harvest stage	Harvest should be done when the colour of base of the fruit is slightly changed.
5.	Coconut (burial of husk)	All stage	Husk burial can be done in coconut basins or in the interspaces to preserve rain water.
6.	Banana	Shooting stage.	High wind Speed (12 - 14 km/hr) is anticipated it is advised to provide mechanical support to banana crop to avoid lodging.

#### SMS Advisory

Cocoa - Weeding, earthing up and mulching is done on need basis.

## Salem

### Weather Advisory Bulletin for livestock, poultry and agro advisory

Livestock, Poultry & Crop	Stage	Weather advisory
Livestock	General	<p>Dairy animals undergo severe stress in hot climate due to prevailing higher temperature. This high temperature stress leads to reduction in the solids not fat (SNF) content of milk. This leads to lower price for the milk sold. This issue can be mitigated by reducing the heat stress by</p> <p>Avoiding the animals to graze during hot weather. Providing sufficient concentrate feed during the colder part of the day. Increasing the energy content of the concentrate feed by giving additional grains at the rate of 100 g per litre of milk produced per day. Grains like maize, cumbu, sorghum, etc whichever is cheaper can be grinded and mixed with the concentrate feed of the dairy animals.</p> <p>Providing sufficient quantity of water throughout the day. Water can be sprayed in the form of fine mist over the animal during the afternoon hours. Housing the animals in the poorly ventilated asbestos houses may be avoided. During summer animals can be comfortably tied under the tree shade with good ventilation. Dairy animals especially buffaloes may be observed for heat signs in the early morning and undertake breeding decisions accordingly.</p>
Agro advisory from Krishi Vigyan Kendra		
Sesame	Pod development	Capsule borer occurrence in sesame crop who were cultivated during thai pattam. Hence, farmers are advised to spray Azadiractin 10000 ppm @ 1ml / litre of water

	stage	during morning hours to control it.
Coconut	General	Rugose spiraling whitefly incidence was noticed in Coconut. It can be managed by spraying Neem oil 5 ml with 1.5 ml sticking agent using power gun sprayer and placing yellow sticky trap of 3 ft X 1.5ft @ 10 numbers / acre. Sooty mould can be controlled by spraying starch solution and allowing chrysoperla insect feeder @ 400 numbers and Encarsia parasitoid @ 100 / acre. Avoid using chemical pesticides.
Watermelon	Vegetative stage	Thrips management in water melon Due to the prevailing change in climate, thrips incidence was noticed in water melon. To control this foliar spraying of neem oil 3 % and setting up of blue sticky trap @ 5 numbers / acre may be followed. If the incidence is more than Economic Threshold level, then foliar spraying of thiamethoxam @ 2 gram / litre of water mixed in 200 litre / acre may be adopted for control.
Vegetable crops	Vegetative stage	Due to high temperature during current weather condition, sucking pest incidence is more in vegetable crops and yield will be reduced. Hence, farmers are advised to install yellow sticky trap ( 5 no / acre) and foliar spray of neem oil and pungam oil (75 ml+75 ml+ 20 ml wetting agent / 15 litre of water ) to control the sucking pest in vegetable crops.
Tapioca	Vegetative stage	Due to change in climate, red spider mite incidence was reported in Tapioca crop. To control this foliar spraying of chemical pesticide Propargite @ 1 ½ ml / litre of water along with adjuvant 1 ml / litre of water may be undertaken.

## Namakkal

### Weather Advisory Bulletin for livestock, poultry and agriculture

Livestock, Poultry & Crop	Stage	Weather advisory
Livestock	General	Dairy animals undergo severe stress in hot climate due to prevailing higher temperature. This high temperature stress leads to reduction in the solids not fat (SNF) content of milk. This leads to lower price for the milk sold. This issue can be mitigated by reducing the heat stress by Avoiding the animals to graze during hot weather. Providing sufficient concentrate feed during the colder part of the day. Increasing the energy content of the concentrate feed by giving additional grains at the rate of 100 g per litre of milk produced per day. Grains like maize, cumbu, sorghum, etc whichever is cheaper can be grinded and mixed with the concentrate feed of the dairy animals. Providing sufficient quantity of water throughout the day. Water can be sprayed in the form of fine mist over the animal during the afternoon hours. Housing the animals in the poorly ventilated asbestos houses may be avoided. During summer animals can be comfortably tied under the tree shade with good ventilation. Dairy animals especially buffaloes may be observed for heat signs in the early morning and undertake breeding decisions accordingly.
Agro advisory from Krishi Vigyan Kendra, Namakkal :		
Sesame	Pod development stage	Capsule borer occurrence in sesame crop who were cultivated during thai pattam. Hence, farmers are advised to spray Azadiractin 10000 ppm @ 1ml / litre of water during morning hours to control it.

Coconut	General	Rugose spiraling whitefly incidence was noticed in Coconut. It can be managed by spraying Neem oil 5 ml with 1.5 ml sticking agent using power gun sprayer and placing yellow sticky trap of 3 ft X 1.5ft @ 10 numbers / acre. Sooty mould can be controlled by spraying starch solution and allowing chrysoperla insect feeder @ 400 numbers and Encarsia parasitoid @ 100 / acre. Avoid using chemical pesticides.
Watermelon	Vegetative stage	Thrips management in water melon Due to the prevailing change in climate, thrips incidence was noticed in water melon. To control this foliar spraying of neem oil 3 % and setting up of blue sticky trap @ 5 numbers / acre may be followed. If the incidence is more than Economic Threshold level, then foliar spraying of thiamethoxam @ 2 gram / litre of water mixed in 200 litre / acre may be adopted for control.
Vegetable crops	Vegetative stage	Due to high temperature during current weather condition, sucking pest incidence is more in vegetable crops and yield will be reduced. Hence, farmers are advised to install yellow sticky trap ( 5 no / acre) and foliar spray of neem oil and pungam oil (75 ml+75 ml+ 20 ml wetting agent / 15 litre of water ) to control the sucking pest in vegetable crops.
Tapioca	Vegetative stage	Due to change in climate, red spider mite incidence was reported in Tapioca crop. To control this foliar spraying of chemical pesticide Propargite @ 1 ½ ml / litre of water along with adjuvant 1 ml / litre of water may be undertaken.

## Dharmapuri

### Weather Advisory Bulletin for livestock, poultry and agriculture

Livestock, Poultry & Crop	Stage	Weather advisory
Livestock	General	Dairy animals undergo severe stress in hot climate due to prevailing higher temperature. This high temperature stress leads to reduction in the solids not fat (SNF) content of milk. This leads to lower price for the milk sold. This issue can be mitigated by reducing the heat stress by Avoiding the animals to graze during hot weather. Providing sufficient concentrate feed during the colder part of the day. Increasing the energy content of the concentrate feed by giving additional grains at the rate of 100 g per litre of milk produced per day. Grains like maize, cumbu, sorghum, etc whichever is cheaper can be grinded and mixed with the concentrate feed of the dairy animals. Providing sufficient quantity of water throughout the day. Water can be sprayed in the form of fine mist over the animal during the afternoon hours. Housing the animals in the poorly ventilated asbestos houses may be avoided. During summer animals can be comfortably tied under the tree shade with good ventilation. Dairy animals especially buffaloes may be observed for heat signs in the early morning and undertake breeding decisions accordingly.
Agro advisory from Krishi Vigyan Kendra		
Sesame	Pod development stage	Capsule borer occurrence in sesame crop who were cultivated during thai pattam. Hence, farmers are advised to spray Azadiractin 10000 ppm @ 1ml / litre of water during morning hours to control it.



Coconut	General	Rugose spiraling whitefly incidence was noticed in Coconut. It can be managed by spraying Neem oil 5 ml with 1.5 ml sticking agent using power gun sprayer and placing yellow sticky trap of 3 ft X 1.5ft @ 10 numbers / acre. Sooty mould can be controlled by spraying starch solution and allowing chrysoperla insect feeder @ 400 numbers and Encarsia parasitoid @ 100 / acre. Avoid using chemical pesticides.
Watermelon	Vegetative stage	Thrips management in water melon Due to the prevailing change in climate, thrips incidence was noticed in water melon. To control this foliar spraying of neem oil 3 % and setting up of blue sticky trap @ 5 numbers / acre may be followed. If the incidence is more than Economic Threshold level, then foliar spraying of thiamethoxam @ 2 gram / litre of water mixed in 200 litre / acre may be adopted for control.
Vegetable crops	Vegetative stage	Due to high temperature during current weather condition, sucking pest incidence is more in vegetable crops and yield will be reduced. Hence, farmers are advised to install yellow sticky trap ( 5 no / acre) and foliar spray of neem oil and pungam oil (75 ml+75 ml+ 20 ml wetting agent / 15 litre of water ) to control the sucking pest in vegetable crops.
Tapioca	Vegetative stage	Due to change in climate, red spider mite incidence was reported in Tapioca crop. To control this foliar spraying of chemical pesticide Propargite @ 1 ½ ml / litre of water along with adjuvant 1 ml / litre of water may be undertaken.

## Krishnagiri

### Weather Advisory Bulletin for livestock, poultry and agriculture

Livestock, Poultry & Crop	Stage	Weather advisory
Livestock	General	Dairy animals undergo severe stress in hot climate due to prevailing higher temperature. This high temperature stress leads to reduction in the solids not fat (SNF) content of milk. This leads to lower price for the milk sold. This issue can be mitigated by reducing the heat stress by Avoiding the animals to graze during hot weather. Providing sufficient concentrate feed during the colder part of the day. Increasing the energy content of the concentrate feed by giving additional grains at the rate of 100 g per litre of milk produced per day. Grains like maize, cumbu, sorghum, etc whichever is cheaper can be grinded and mixed with the concentrate feed of the dairy animals. Providing sufficient quantity of water throughout the day. Water can be sprayed in the form of fine mist over the animal during the afternoon hours. Housing the animals in the poorly ventilated asbestos houses may be avoided. During summer animals can be comfortably tied under the tree shade with good ventilation. Dairy animals especially buffaloes may be observed for heat signs in the early morning and undertake breeding decisions accordingly.
Agro advisory from Krishi Vigyan Kendra		
Sesame	Pod development stage	Capsule borer occurrence in sesame crop who were cultivated during thai pattam. Hence, farmers are advised to spray Azadiractin 10000 ppm @ 1ml / litre of water during morning hours to control it.
Coconut	General	Rugose spiraling whitefly incidence was noticed in Coconut. It can be managed by



		spraying Neem oil 5 ml with 1.5 ml sticking agent using power gun sprayer and placing yellow sticky trap of 3 ft X 1.5ft @ 10 numbers / acre. Sooty mould can be controlled by spraying starch solution and allowing chrysoperla insect feeder @ 400 numbers and Encarsia parasitoid @ 100 / acre. Avoid using chemical pesticides.
Watermelon	Vegetative stage	Thrips management in water melon Due to the prevailing change in climate, thrips incidence was noticed in water melon. To control this foliar spraying of neem oil 3 % and setting up of blue sticky trap @ 5 numbers / acre may be followed. If the incidence is more than Economic Threshold level, then foliar spraying of thiamethoxam @ 2 gram / litre of water mixed in 200 litre / acre may be adopted for control.
Vegetable crops	Vegetative stage	Due to high temperature during current weather condition, sucking pest incidence is more in vegetable crops and yield will be reduced. Hence, farmers are advised to install yellow sticky trap ( 5 no / acre) and foliar spray of neem oil and pungam oil (75 ml+75 ml+ 20 ml wetting agent / 15 litre of water ) to control the sucking pest in vegetable crops.
Tapioca	Vegetative stage	Due to change in climate, red spider mite incidence was reported in Tapioca crop. To control this foliar spraying of chemical pesticide Propargite @ 1 ½ ml / litre of water along with adjuvant 1 ml / litre of water may be undertaken.

## Karaikal

### Agro Advisory

Crop/livestock	Stage/Particulars	Agro Advisory
Blackgram/ Greengram	Flowering and pod development	To manage powdery mildew in blackgram spray Propiconazole @ 1 ml/l or Carbendazim @ 1 ml/l.
	Leaf Crinkle	To manage leaf crinkle disease in green gram, control the white fly (vector of leaf crinkle) by spraying thiamethoxam 25 WG @ 0.2 g/l.
Cotton	Vegetative growth	To manage weeds in cotton, apply post emergence herbicide pyriithobac sodium @ 62.5g a.i./ha + quizalofop ethyl @ 50 g a.i./ha at 20-25 DAS.
Brinjal	Phomopsis blight	To manage Phomopsis blight in brinjal, spray Pseudomonas fluorescens or Bacillus subtilis @ 5g or 5ml/ l.
Cattle	Babesiasis	In cattle, as a preventive measure for Babesiasis disease, apply Butox @ 2 ml/l of water on cattle and also spray it on the nearby areas of the cattle shed to control ectoparasites.

SMS: During next five days the sky will be cloudy and dry.

## Puducherry

### Agro Advisory

Crop	Stage/ Particulars	Agro Advisory
Blackgram / Greengram		To manage yellow mosaic virus disease in black gram and green gram, spray Methyldematon 25%EC 1ml/l or Dimethoate 30%EC 1ml/l to manage vectors like whitefly and aphids.
		To manage powdery mildew in blackgram spray Propiconazole @ 1 ml/l or Carbendazim @ 1 ml/l.
Groundnut -Pegging		In groundnut crop apply gypsum 200kg + borax 10 kg and earthing up on 45 DAS for improving flowering and pod formation.
Brinjal - Phomopsis blight		To manage Phomopsis blight in brinjal, spray Pseudomonas fluorescens or Bacillus subtilis @ 5g or 5ml/ l.
Babesiasis		In cattle, as a preventive measure for Babesiasis disease, apply Butox @ 2 ml/l of water on cattle and also spray it on the nearby areas of the cattle shed to control ectoparasites.
Sheep and goat pox		There is a chance of occurrence of sheep and goat pox in summer season. Hence, to prevent the pox, sheep and goat should be vaccinated before summer.

