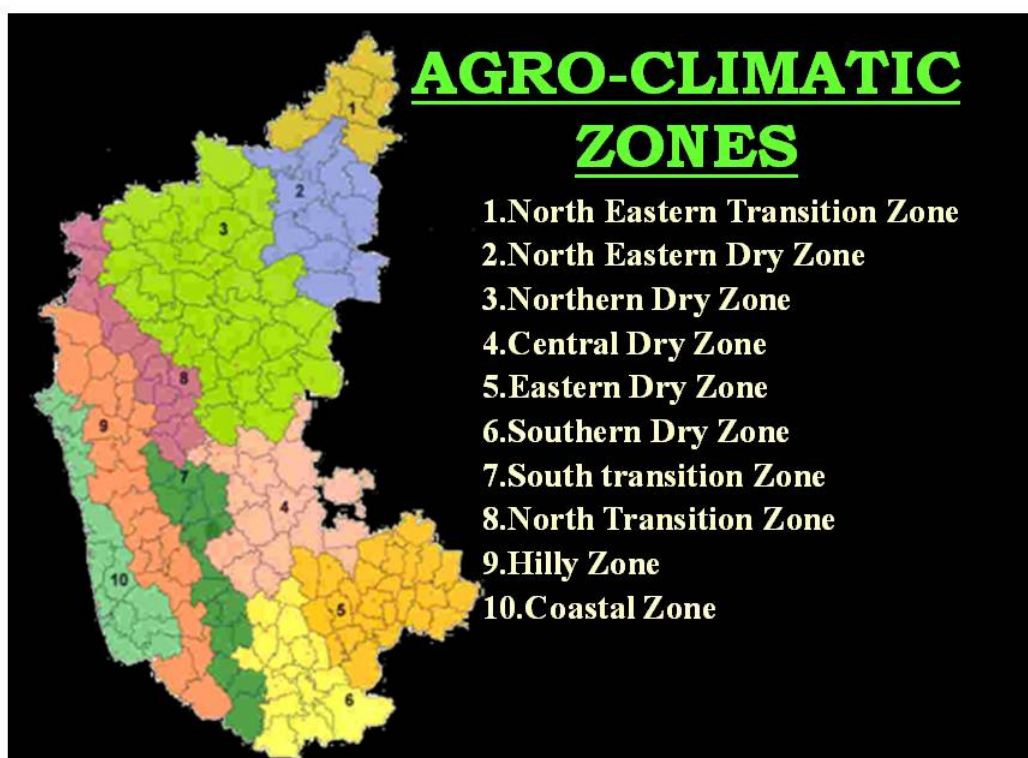


**COMPOSITE BULLETIN OF AGROMETEOROLOGICAL ADVISORY
KARNATAKA STATE**

**ISSUED BY METEOROLOGICAL CENTRE, BENGALURU (IMD)
IN COLLABORATION WITH
STATE AGRICULTURE DEPARTMENT &
AGRICULTURAL UNIVERSITIES OF KARNATAKA
FOR THE PERIOD 20th JUNE TO 24th JUNE 2018
ISSUED ON TUESDAY, THE 19TH JUNE 2018**

AGROCLIMATIC ZONES OF THE STATE



SL.NO.	AGROCLIMATIC ZONE	DISTRICTS	AGROMET FIELD UNIT (AMFU) LOCATION
1.	North East Transition Zone	Bidar	Bidar
2.	Northeastern Dry Zone	Kalaburgi, Raichur, Ballari, Yadgiri, Koppal	Raichur
3	Northern Dry Zone	Vijayapura, Gadag, Bagalkot	Vijayapur
4.	Central Dry Zone	Tumkuru, Chitradurga, Davangere	Hiriyur
5.	Eastern Dry Zone	Bengaluru Rural, Bengaluru Urban, Kolar, Ramanagara , Chikballapura	Bengaluru
6.	Southern Dry Zone	Mysuru, Mandya, Chamarajanagar, Kodagu	Naganahalli
7.	Southern Transition Zone	Hassan, Shivamogga, Chikkamagaluru	Navile, Shivamogga
8.	North Transition Zone	Dharwad, Belagavi, Haveri	Dharwad
9.	Hill Zone	Uttara Kannada	Sirsi
10.	Coastal Zone	Dakshina Kannada, Udupi	Bramhavar

Summary for the past 4 days over the State:

On 16TH JUNE:

Southwest Monsoon has been weak over Coastal Karnataka & North Interior Karnataka.

Rainfall occurred at most places over Coastal Karnataka, at a few places over South Interior Karnataka and at isolated places over North Interior Karnataka.

On 17TH JUNE:

Southwest Monsoon has been weak over Interior Karnataka.

Rainfall occurred at most places over Coastal Karnataka; at a few places over South Interior Karnataka and at isolated places over North Interior Karnataka.

On 18TH JUNE:

Southwest Monsoon has been weak over Interior Karnataka.

Rainfall occurred at most places over Coastal Karnataka and at a few places over Interior Karnataka

On 19TH JUNE:

Rainfall occurred at most places over Coastal Karnataka and at a few places over Interior Karnataka.

State Rainfall forecast:

Day 1 valid until 0830 hrs IST of 20TH JUNE : Rain/ Thundershowers likely to occur at most places over Coastal Karnataka and at many places over South Interior Karnataka & North Interior Karnataka .

Day 2 valid until 0830 hrs IST of 21ST JUNE : Rain/ Thundershowers likely to occur at most places over Coastal Karnataka and at many places over South Interior Karnataka & North Interior Karnataka .

Day 3 valid until 0830 hrs IST of 22ND JUNE to 24TH JUNE : Rain/ Thundershowers likely to occur at most places over Coastal Karnataka and at many places over South Interior Karnataka & at a few places over North Interior Karnataka.

Heavy rainfall Warning:

Day 1 valid until 0830 hrs IST of 20TH JUNE: Heavy rain very likely to occur at isolated places of all districts of Coastal Karnataka .

Day 2 valid until 0830 hrs IST of 21ST JUNE & 22ND JUNE : Heavy rain very likely to occur at isolated places of all districts of Coastal Karnataka and at isolated places of Chikkamgaluru, Hassan, Kodagu, Shivamogga districts of South Interior Karnataka.

Day 3 valid until 0830 hrs IST of 22ND JUNE : Heavy rain very likely to occur at all the districts of Coastal Karnataka and Chikkamgaluru, Hassan, Kodagu, Shivamogga districts of South Interior Karnataka.

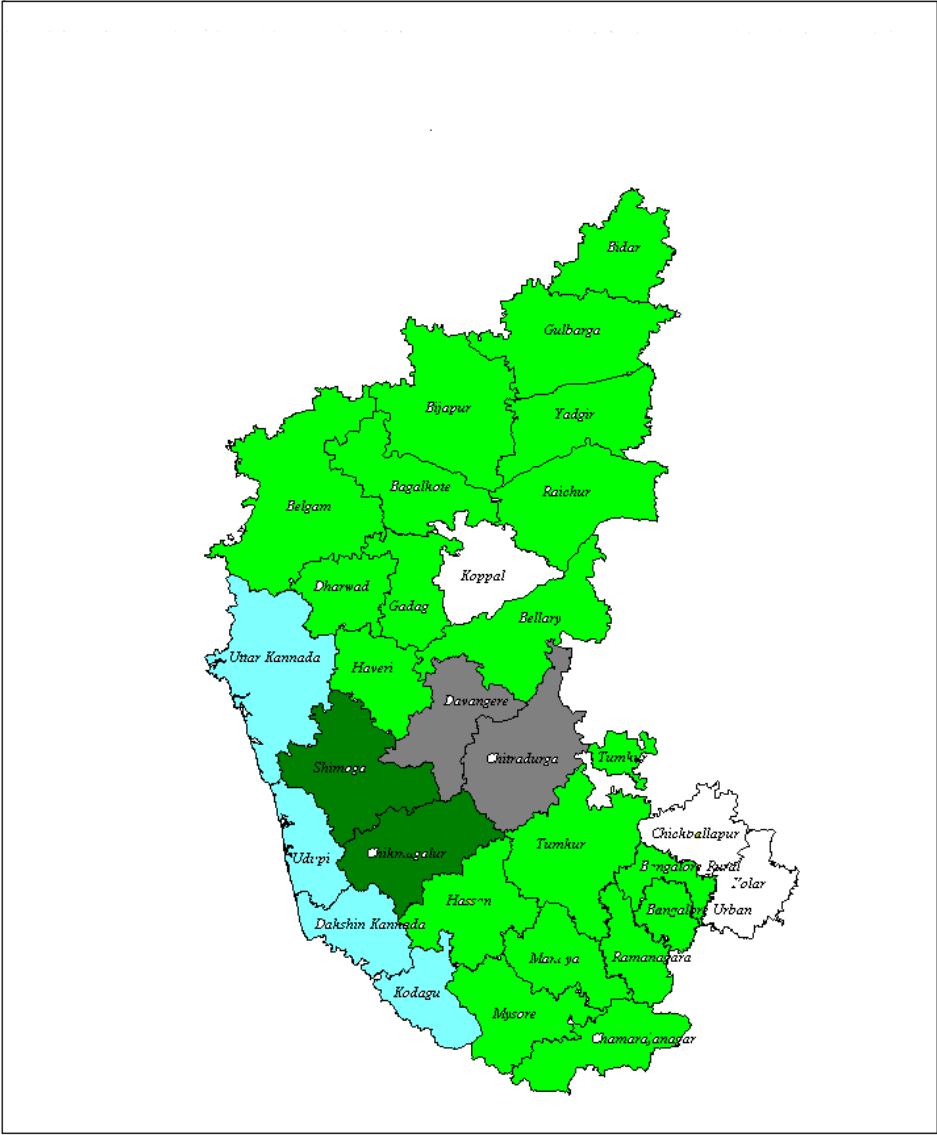
Day 4 valid until 0830 hrs IST of 23RD JUNE & 24TH JUNE : Heavy rain very likely to occur at isolated places of all districts of Coastal Karnataka .

Thunderstorm/Squall Warning:








valid until 0830 hrs IST of 20TH JUNE TO valid until 0830 hrs IST of 24TH JUNE: NIL

Outlook: No large change is expected over the State.

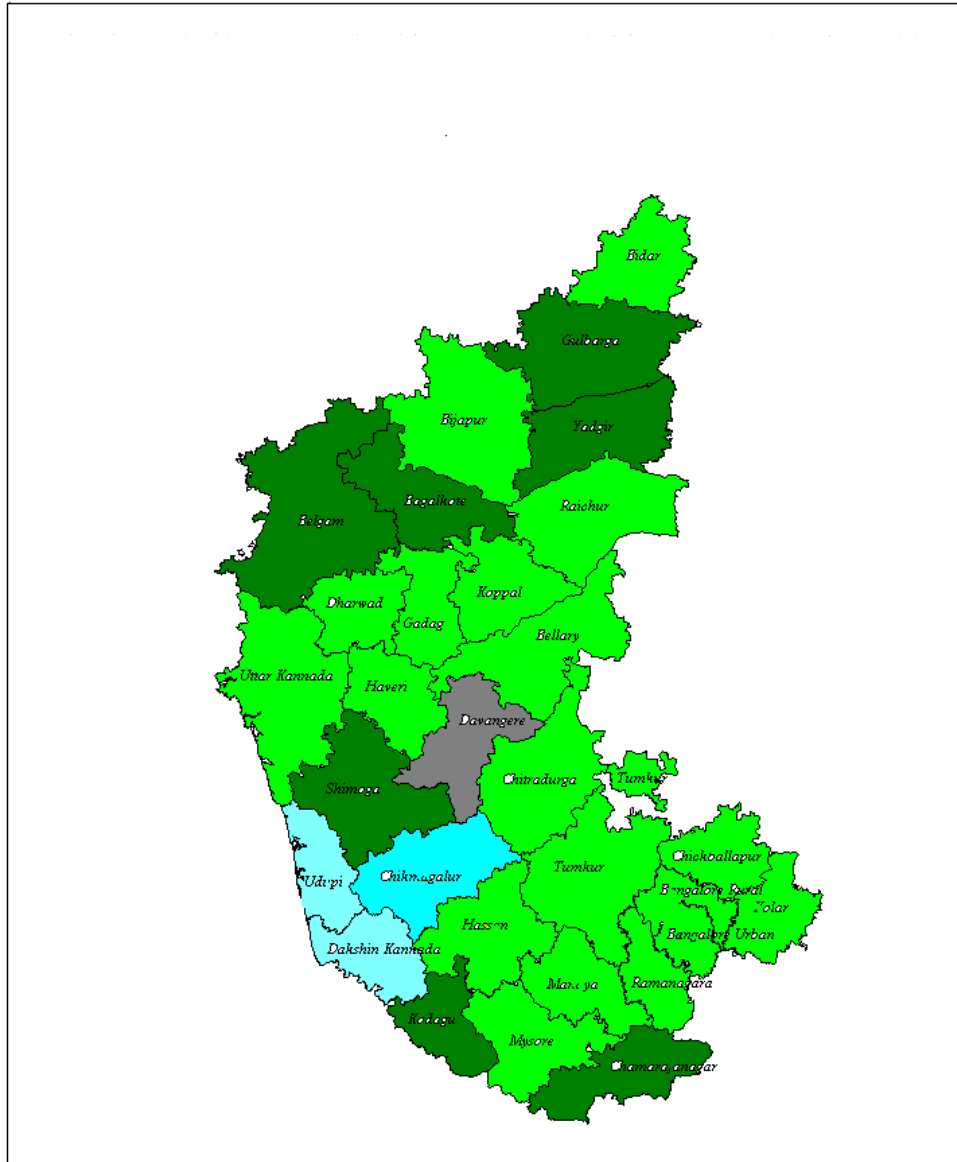
Rainfall forecast for the next 5 days:
20.6.2018.










LEGEND IN Cms:

	>25		12.5-25		6.5-12.4
	2.5-6.4		0.5-2.4		0.1-0.4
	No Rain				

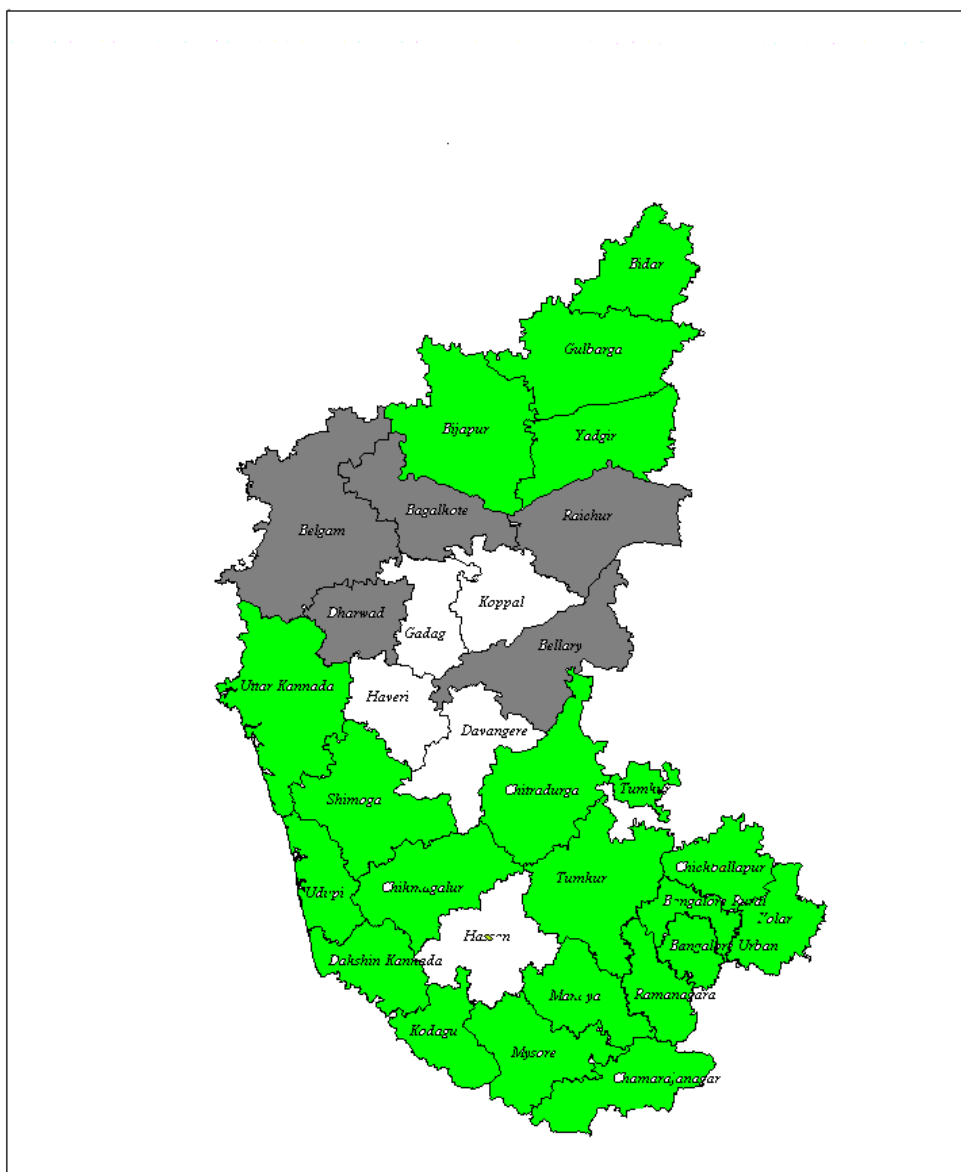
22.6.2018.







LEGEND IN Cms:

	>25		12.5-25		6.5-12.4
	2.5-6.4		0.5-2.4		0.1-0.4
	No Rain				

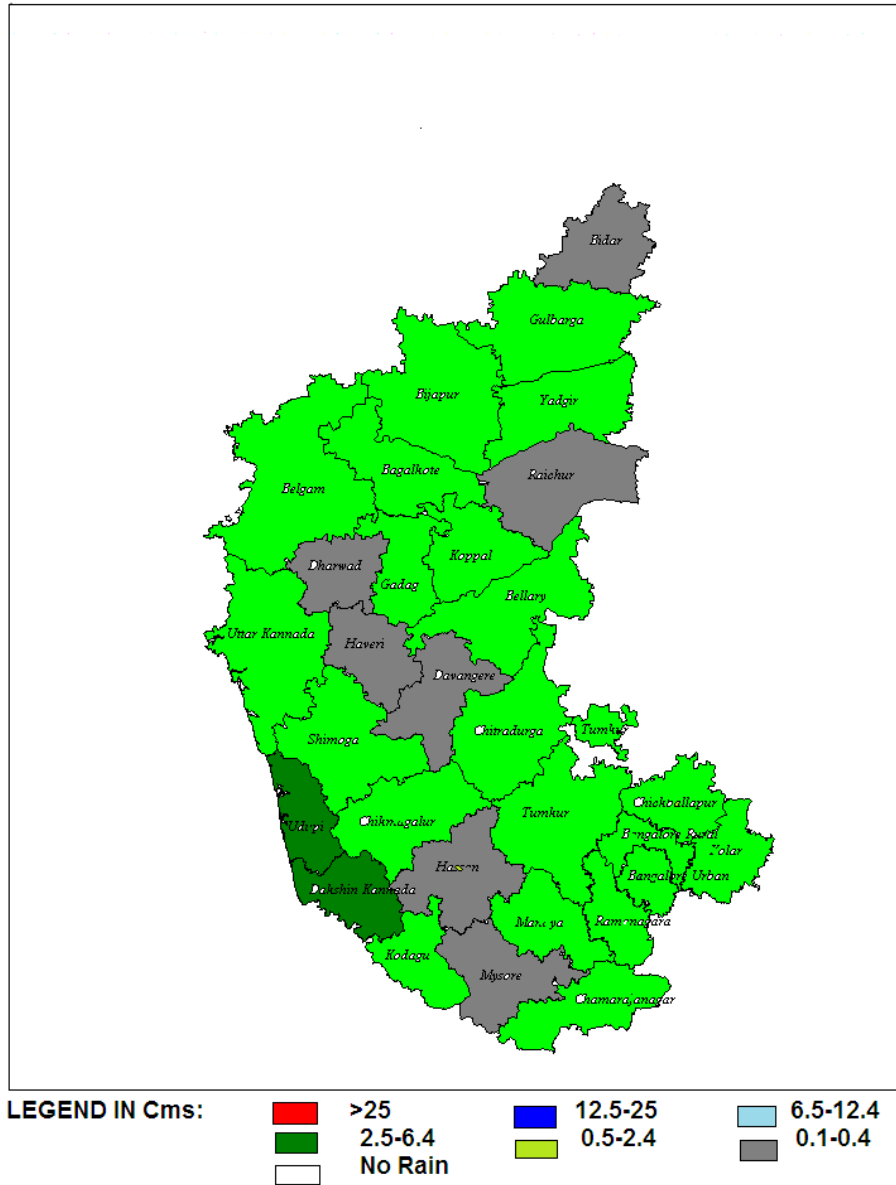
23.6.2018.



LEGEND IN Cms:

	>25		12.5-25		6.5-12.4
	2.5-6.4		0.5-2.4		0.1-0.4
	No Rain				

24.06.2018.



PART II
AGRICULTURAL ADVISORIES

VEGETABLES

Districts	VG	GI/TU	CI
Bidar			
Kalaburgi			
Yadgiri			
Koppal			
Ballari			
Raichur			
Vijayapura			
Bagalkote			
Gadag			
Tumkuru			
Chitradurga			
Davangere			
Bengaluru (R)			
Bengaluru (U)			
Chikballapura			
Kolar			
Ramanagar			
Chamarajnagar			
Kodagu			
Mandya			
<i>Mysuru</i>			
Hassan		ES	
Shivamogga		ES	
Chikkamagaluru		ES	
Belagavi	FD		FD

Dharwad	FD		FD
Haveri	FD		FD
Uttara Kannada			
Dakshina Kannada			
Udupi			

HORTICULTURAL CROPS

Districts	MG	SC	GR	CH	CO	BA	PG	WM	CW
Bidar									
Kalaburgi									
Yadgiri									
Koppal									
Ballari									
Raichur									
Vijayapura									
Bagalkote									
Gadag									
Tumkuru									
Chitradurga									
Davangere									
Bengaluru (R)	H								
Bengaluru (U)	H								
Chikballapura	H								
Kolar	H								
Ramanagar	H								
Chamarajnagar									
Kodagu									
Mandya									
Mysuru									
Hassan	FM	TI			Fr& NUF				
Shivamogga	FM	TI			Fr& NUF				

Chikkamagaluru	FM	TI			Fr&NUF					
Belagavi		TI		H						
Dharwad		TI		H						
Haveri		TI		H						
Uttara Kannada										
Dakshina Kannada										
Udupi										

CROPS

Districts	GN	COP	Rg	SOR	COT	BG/GG /RG	CP	MZ	SB	PD	WH	AN
Bidar						S			S			
Kalaburgi												
Yadgiri												
Koppal												
Ballari												
Raichur												
Vijayapura												
Bagalkote												
Gadag												
Tumkuru												
Chitradurga												
Davangere												
Bengaluru (R)								S,G				
Bengaluru (U)								S,G				
Chikballapura								S,G				
Kolar								S,G				
Ramanagar								S,G				
Chamarajnar		S	S			S		S				
Kodagu		S	S			S		S				
Mandya		S	S			S		S				
Mysuru			S			S		S				
Hassan						S				LP		F & NUF
Shivamogga						S				LP		F & NUF

Chikkamagaluru						S				LP		F & NUF
Belagavi	S					S		S	S			
Dharwad	S					S		S	S			
Haveri	S					S		S				
Uttara Kannada												
Dakshina Kannada												
Udupi												

LEGEND

CROP/VEGETABLE NAMES: GN-Groundnut, MZ-Maize, AN-Areca nut, COP-Cowpea, BG-Black Gram, GG-Green Gram, RG-Red Gram, SC-Sugarcane, CO-Coconut; CP-Chickpea, SOR-Sorghum, SB-Soya bean, WM-Watermelon, VG-Vegetables, CI-Chili, SF-Safflower ;RI: Rice ;PD: Paddy; MG: Mango, CH: Chico, CW: Cashew; GR: Grapes, COT: Cotton; BA: Banana; PG: Pomegranate; GN: Ginger; Rg: Ragi; TU:Turmeric; WH -wheat

CROP STAGES

- **NP:** Nursery Preparation; **Pf:** Preflowering; **G:** Germination; **EV:** Early Vegetative; **S:** Sowing; **Sp:** Sprouting; **DG:** Development Growth **GG:** Grand Growth **T:** Transplanting, **Fi:** Flower Initiation **F:** Flowering, **GF:** Grain filling, **GD:** Grain Development; **FM:** Fruit maturity **G:** Germination, **EV:** Early vegetative, **VG:** Vegetative growth, **BF:** Boll Formation: **BM:** Boll maturity, **P:** Picking, **FLI:** Flag leaf initiation, **PF:** Pod formation, **PD:** Pod Development; **PM:** Pod Maturity, **CRI:** Crown root initiation, **Br:** Branching, **FD:** Fruit Development, **H:** Harvesting, **LJ:** Late jointing Stage. **M:** Maturation, **R:** Ripening. **CF:** Cob Formation **CI:** Cob initiation **F& FS:** Flowering to fruit setting, **HE:** Head emergence, **MS :** Milking stage **PI:** Planting, **FI:** Filling, **GM:** Grain Maturation, **R:** Ripening, **FR:** Fruit Setting, **TI:** Tillering, ; **Bf:** Bud formation; **PI:** Panicle Initiation; **NUF & M:** Nut formation and Maturity; **JU:** Juvenile; **LP:** Land preparation; **NM:** Nut Maturity, **NU:** Nursery; **KH:** Knee high ; **Sd:** Seedling stage; **B:** Booting; **Sq:** Square formation; **Re:** Reproductive; **Pe:** Pegging; **PoI:** Pod Initiation; **Ts:** Tasselling; **E:** Establishment; **PgI:** Peg Initiation; **PL:**Ploughing; **SD:** Soft dough stage; **HD:** Hard dough stage; **Ra:** Ratoon; **Fr:** Fruiting; **SS:** Seed Setting; **IBI:** Inflorescence Bud initiation; **SS:** Silking stage; **EI:** Ear head Initiation; **G:**Growth; **CMT:** cob maturity stage: **Ir:** : Irrigation **ES:** Emergence stage

PART II
AGROCLIMATIC ZONEWISE AGRICULTURAL AGROMETEOROLOGICAL
ADVISORIES

NORTH EAST TRANSITION ZONE, BIDAR

BIDAR:

Main crops	Stage	Agricultural Advisories
General		<p>Field preparation Farmers are advised to get ready with Certified seeds of various crops such as soybean(JS-335),Green gram(BGS-9),Blackgram(DU-1) &Redgram(GRG-811) respectively. Further farmers are advised to prepare their fields according to various crop spacings.</p>
Soybean	Sowing	<p>Selection of Seed Varieties,quantity required and adoption of agronomic practices Improved Varieties: JS-335,Dsb-1 Seed rate/acre: 30 kg Spacing:30X10 cm Sowing time:May 15 to July15 (JS-335) and for Dsb-1(June) As per the scientific recommendations, Soybean seed requirement for one acre must be treated with 90 gram thiram75WP followed by 500 gram Rhizobium and 500 gram phosphorous solubilising bacteria and then sown. Soon after the sowing of soybean seeds or the next day,spraying of Pre-emergent herbicide such as Pendimethalin (1.2lit) or Alachlor(1.5 lit) dissolving in 400 litres of water and then sprayed for one acre land.</p>
Green gram	Sowing	<p>Selection of Seed Varieties,quantity required and adoption of agronomic practices Improved Varieties: Selection-4,BGS-9 Seed rate/acre: 5 kg Spacing:30X10 cm Sowing time:June and July Measures to be undertaken to overcome drought stress In order to overcome drought stress, the green gram seeds required for one acre land must be initially dissolved in Calcium chloride(2%) solution for one hour and then dried for 7 hours under shade, followed by treating the seeds with 500 gram of phosphorous solubilising bacteria and then sown.</p>

Black gram	Sowing	<p>Selection of Seed Varieties,quantity required and adoption of agronomic practices Improved Varieties: DU-1,TAU-1 Seed rate/acre: 5 kg Spacing:30X10 cm Sowing time:June</p> <p>Measures to be undertaken to overcome drought stress In order to overcome drought stress, the green gram seeds required for one acre land must be initially dissolved in Calcium chloride(2%) solution for one hour and then dried for 7 hours under shade, followed by treating the seeds with 500 gram of Rhizobium culture and then sown.</p>
Animal Husbandry	Livestock/poultry	<p>In order to overcome the moisture stress in milch and draft animals during summer,it is advisable to harvest green fodder crops such as Maize,Bajra & jowar respectively. Deworming of animals should be carried out .</p>

NORTHEASTERN DRY ZONE, RAICHUR

KALABURGI/ YADGIRI/ RAICHUR/KOPPAL/ BALLARI :

NOT YET RECEIVED

NORTHERN DRY ZONE, VIJAYAPURA

VIJAYAPURA/ BAGALKOTE/ GADAG:

NOT YET RECEIVED

CENTRAL DRY ZONE, HIRIYUR

Chitradurga/Davanagere/Tumkur:

- Take up land preparation and strengthen the bund with fodder grass which will facilitate conservation of rainwater due to pre-monsoon showers.
- Ploughing across the slope will make insitu soil moisture conservation Because of higher temperature prevailing in the zone, farmers are asked to take up mulching wherever possible
- The FYM (Farm yard manure) should be transported just before land preparation and should not be allowed to dry.
 - Ideal time for monsoon crops sowing wherever sufficient soil moisture available in field/land.

- **Under Mono cropping**

Castor: **DCH-177**

Cotton: **Bt Cotton (Bollgard-I&II)**

Red gram: **BRG-5, 7**

Under double cropping

Groundnut: TMV-2, JL-24

Onion: ArkaKalyan, Bhima Super, Bellary Red & Satara Local

Maize: Hemashree, Nityashree

Intercropping of Groundnut + Red gram in 8:2 proportion and Groundnut+ Castor in 8:2 proportion
It gives good income to the farmers.

Seed treatment of Groundnut, Redgram crops with Rhizobium and phosphorous solubilizing bacteria

Weed management in Onion

Spraying of Pre-emergence herbicides 0.17 litre oxyflourfen (23.5EC) or 1.0 Litre Pendimethalin in 300 litre of water in 2-3 days after sowing of Onion.

Pomegranate

- ✓ To manage Bacterial blight disease, spray the crop with Streptomycin Sulphate 0.5 g. + Copper oxy-chloride 2 g. dissolved in one liter water. Then take up spraying of
- ✓ micro nutrients viz., 1 g. Zinc Sulphate + 1 g. Magnesium Sulphate + 1 g. Borax + 1 g. Calcium dissolved in one liter of water.
- ✓ To manage leaf and fruit spot disease, spray the crop with 2 ml Chlorothonil dissolved in one liter of water.

EASTERN DRY ZONE, BENGALURU

BENGALURU URBAN/ BENGALURU RURAL/RAMANAGARA/CHIKBALLAPURA KOLAR:

Crop	Stage/ Condition	Pest and Disease	Agro advisories
Agriculture crop			
	<ul style="list-style-type: none"> ➤ AARIDHRA rainstar starts from June 22nd to July 5th. The normal rainfall of AARIDHRA rainstar is 20.7mm. .Farmers are advised to utilize the rain water for sowing of kharif crop sowing. ➤ Where ever sufficient rainfall received, farmers are advised to go for sowing kharif crops. ➤ Wind speed is high, provide staking support to Banana and vegetable crop to 		

- protect from uprooting of crops.
- The farmers are procure good quality of seeds and fertilizers. Take up the germination test for Kharif sowing.
 - Before sowing take up land preparation and strengthen the bund which will facilitate conservation of rainwater of monsoon showers.
 - Ploughing across the slope will make insitu soil moisture conservation and Take up land leveling so that more rain water is conserved in the soil.
 - Agro forestry on the bund involving *Melia dubia* (Hebbevu), Silver oak and Causurina is recommended for sustainable income under abnormal extreme rainfall events .

The following crops are suggested for sowing.

The following crops are suggested for sowing.

Under monocropping the long duration crops:

Redgram : TTB-7, BRG-1,2,4&5
 Castor: DCS-9 (Jyothi), DCH-177&32

Under double cropping the short duration crops:

Ragi : Indaf -9, ML-365 ,

Maize: Ganga-11, Deccan -103, Vijaya composite, Composite NAC-6004,6002, Hybrid-Nityashree (NAH-2049)

Seasamum : Navile-1, T-7

Groundnut : TMV-2, JL-24, KCG-6

Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84,178

Black gram: Karagao-3, T-9, Rashmi(LBG-625)

Mango

- Taken up summer plough to expose the soil to kill the different stages of insect.
- Take up harvesting without dropping fruit on the soil to avoid the damage.

Animal Husbandry

- Vaccinate the cow against the Foot and Mouth Disease (FMD) & Black Quarter.

SOUTHERN DRY ZONE, NAGANHALLI

MYSORE/ MANDYA/CHAMARAJNAGARA/KODAGU:

Crop / Animals	Stage/ Condition	Pest and Disease	Agro advisories
Following crops and varieties suitable for the month of June.			
<ul style="list-style-type: none"> ❖ Paddy: jaya, BR-2655 ❖ Hybrid Jower: CSH-5, CSH.-9, CSV-4. ❖ Maize: Ganga-11, Decon-101, Vijaya Composit, N.A.C-6002, N.A.C-6004, Nithyashree, N.A.H-1137. ❖ Ragi: Indaf-8, MR-1, PR-202, GPU-28, L-5 And KMR-301 ❖ Redgram: BRG-1 & 2, TTB-7, Hyderabad-3C ❖ Horticulture crops: Tomato, Chilli, Brinjal, Radish, Ladies finger, Beans, Watermelon, Carrot, Onion, mango, banana, sapota, guava 			
<p>Taking advantage of this rainfall, Farmers are advised to take up sowing of ragi, Jower, Maize and pulses like Avare, cowpea etc.. purchase seeds from Raitha samparka kendra (RSK)</p> <p>While sowing of pulse crops, seeds may be treated with appropriate strain of rhizobium culture before sowing. (20gm/kg. of seed)</p>			

SOUTHERN TRANSITION ZONE, NAVILE, SHIVAMOGGA

SHIVAMOGGA / HASSAN / CHIKKAMAGALURU:

Crops/ Components	Stage / Condition	Pest and Disease	Agro advisories
Maize	-	-	Go for sowing by using certified seeds. Use pre emergent herbicide like Atrazine @ 1 kg a.i. or 1 litre Pendimethalin 30% E.C. or 170 ml Oxyflurofen 23.5 E.C. mix with 300 litre of water and spray within 3 days after days for one acre of area.
Paddy	Land preparation for nursery	-	Go for sowing of green manuring crops wherever paddy growing area is available.
Redgram	Sowing	-	Go for sowing of Redgram by using certified seeds.
Areca nut	Flowering/Nut formation	Leaf spot	Spray Mancozeb @ of 2 g/lit or copper oxychloride at 3g/lit

	stage	Hidimundige disease	Spray 225 gm/palm equal proportion of copper sulphate + lime twice in a year.
		Spindle bug	Keep 10 g Phorate granules in polythine bag and make small hole and placed near spindle or spray 2 ml/litre Quinolphos
		Inflorescence dieback	Recommended to spray of Carbondizim 2 g or Mancozeb 2 g/litre of water
		Bud rot	For infected plant use 10 Bordeaux paste @ or 3 percent copper oxychloride after cleaning of infected part by using clean water.
		Anabe roga (Ganoderma)	Drench Hexaconazole (Contof) solution @ 1 ml/lit.
		Nut drop/splitting	Application of borax (2 g/litre of water) during early stages of the disease reduces splitting. Improve drainage in ill drained gardens
		Koleroga	Spray 1% Bordeaux mixture or 3 g copper oxychloride or Metalaxyl + Mancozeb 72 WP 2 g per liter water
Coconut	Flowering/Nut formation stage	Mites	Spray water soluble sulphur @ 5 g/liter of water or spray a mixture of neem oil (20 ml) + garlic solution (20 g) + soap powder solution (5 g) per liter of water to the coconut flower and fruit bunch.
		Leaf spot	Spray Mancozeb 75 W P @ 2 g/litre or copper oxychloride 50 WP 3 g/litre on leaf.
		Black headed hairy caterpillar	Spraying of bioagents viz., <i>Metarhiziumanisopliae</i> @ 20 g/litre or <i>Baeuarea bassiana</i> @ 20 g/litre or <i>Goniozous nephentidis</i> @ 1 adult/ palm
		Rhinoceros beetle	Remove the beetle from infected part and fill 2 % Quinolphos or 5 % Melathion in sand @ 1:1 ratio.
		Anabe roga (Ganoderma)	Drench Hexaconazole (Contof) solution @ 1 ml/lit.
Ginger / Turmeric	Emergence stage	Leaf eating caterpillar	Advised to go for spraying Dimethoate 30 EC @ 1.7 ml or 2 ml Melathion 50 EC/litre of water
Banana	-	Leaf spot/Sigatoka	As a precautionary measure spray carbendizim + mancozeb (SAAF) @ 2.0 g / litre of water followed by (15 days after) chlorothalanil @ 2.0 g/ litre of water

		Pseudo stem weevil	Suggested to give stem injection with 5 ml Chloropyriphos or Dimethoate or spray 2.5 ml of Chloropyriphos per litre of water.
		Panama wilt	Drenching of Carbendizim 0.2% or Propiconazole 0.5 ml/ litre once in a month.
Mango	Fruit maturity	Fruit rot	This disease can be managed by avoidance of injury to the fruits and its contact with soil and spray 0.5% Carbendizim to the fruits.
Sugarcane	Tillering	Leaf spot	Spray copper oxychloride @ 2.5 g or Mancozeb @ 2 g/ litre of water at 8, 12, 16 and 20 th week after sowing by using 300 litre of solution per acre.
		Striga weed	Use 2.4.D Sodium salt 1 k.g mix in 500 litre of water and spray or spray 20% Urea solution on weed
		Soot borer	Spray Chloropyriphos 20 EC @ 2 ml/litre. By using 300 litre of solution per acre.

NORTH TRANSITION ZONE, DHARWAD

BELAGAVI/DHARWAD/ HAVERI:

- **8.8 mm** rainfall was recorded during last **Four days**.
- The sky will be generally cloudy for next 4-5 days and light to moderate rainfall may be expected.
- Farmers are advised to continue the sowing of Kharif crops where the soil moisture condition is favorable for sowing.
- following seeds may be used for Kharif sowing:
- Viz: Green gram: DGGV-2, S-4, Pusa Baisaki.
- Black gram: DU-1, DBGV-5: Soybean: Dsb-21, JS-335, JS-93-05
- Groundnut: G 2-52, GPBD-4, GPBD -5 (Rainfed): HD-86, TAG-24 (Irrigated) Redgram: TS3R.
- Maize: Arjun, GH-0727 and other hybrids recommended for this region may be used.
- Seeds & Fertilizer Requirement per acre:

Sl.No	Quantity Kg/acre						Qty. gm/acre seed	
	Crops	Seeds Kg/acre	Urea kg/acre	DAP kg/acre	MOP kg/acre	Gypsum	Rhizobium	PSB
1	Green	5-6	44	5	40	40	200	500

	gram							
2	Black gram	5-6	44	5	40	40	200	200
3	Soybean	JS-335:30	70	8	17	40	500	500
		Others:25						
4	Groundnut	50-60	44	5	17	200	1000	1000
5	Cotton	2.5-3.0	70	44	33	-	-	200
6	Maize	9-11	108	57	43	-	-	-
7	Paddy	25 (TP) 32-40 Sowing	70	44	33	-	-	-

- **Chemical weed control:**

- **Soybean:** spray 1.6 litre Alachlor 50 EC **OR** 0.8 litre Chlomazole 50 EC in 300 liters of water for one acre area and spray on the day/next day after sowing.

- **Maize:** Mix 1.0 Kg Atrazine 50 WP & 1.0 litre Pendimethalin 30 EC in 300 liters of water for one acre area and spray on the day/next day after sowing.

- **Drill sown paddy:**

Spray pendimethalin 30EC @1.0 kg mix in 200 litre of water spray the solution to 1 acre area, spraying should be done on the day or next day after sowing.

Sugarcane	<ul style="list-style-type: none"> • Give irrigation once in 10 days at tillering stage.
Sapota/Chikku	<ul style="list-style-type: none"> • There is a chance of rainfall, fully matured fruits can be harvested immediately.
Chilli/Tomato Brinjal	<p><i>Pest and Diseases management in Tomato</i></p> <ul style="list-style-type: none"> • If the Crop is at fruit initiation to fruit development stage. • Tomato If fruit borer is noticed- spray Thiodicarb 1gm 75WP per litre of water. • For control of Powdery mildew in Tomato Spray 3 g water soluble Sulphur per litre of water. • Growing of one line Radish in every two lines of Tomato Reduces the fruit rot in tomato. • looking to the weather and soil type irrigate the crop once in 15 days black soil and 8-10days in red soils. • Harvest the matured fruits in chilli, sundry and store. • To manage leaf curl disease in tomato take up spraying of 1 ml Acetamaprid dissolved in 4 liter of water.

Animals

- For milch animals regularly follow schedule of 1 kg feed + 50 g mineral mixture per 2 litres of milk yield. Feed animals with a mixture of green grass + hay + minerals + dry feed like a khichri.
- Proper ventilation should be maintained for free circulation of air in the sheds.
- Maintain optimum moisture of 60 to 70 per cent in vermin compost pits and drain out the excess water from the vermipits.

HILL ZONE, SIRSI**UTTARA KANNADA:****Paddy**

- Selected Paddy seeds should be treated with bavistin as seed treatment to avoid the seed borne diseases.(1gm /kg seeds).
- Paddy growing farmers should use the recommended variety for their area. For low land paddy Intan, Abhilash and Hemavati. For upland paddy Jaya, Amrut or Prasanna variety can be used.
- To control the weeds in drill sown paddy area farmers are advised to take up the spraying of Butachlor @ 4 ml per lit of water. Spraying should be either on the day of sowing or next day and spray should wet the soil.

Arecanut

- The strong and better areca nut seedlings can be transferred from primary seed bed to secondary seed bed.
- Root grub in arecanut: Pour 3 liters of Chloropyriphos solution (3 ml per liter of water) to base of arecanut.
- For control of mites as a precautionary measure spray dicofol @ 2.5 ml / lit of water or Sulphur @ 4g/lit of water.

Coconut

- For control of mites spray water soluble sulphur @ 5gm/liter of water or spray a mixture of neem oil (20 ml) + garlic solution (20 gm) + soap powder solution (5 gm) per liter of water to the coconut flower and fruit bunch

Pepper

- This is the best time for the raising and multiplication of seedlings of Black pepper and can be continued.

Ginger and Turmeric

- The seed treatment has to be done with 3% Copper Oxychloride by soaking the seed for 20-30 minutes.
- It is the right time to clean and repair of the all drainage channels, as it should be completed before the start of the rain.
- It is the right time to clean up the inter drainage channels so that rain water should flow easily.
- It is right time to give basal dose of fertilizer to plantation crops. For the four year old and above tree or vine, the below mentioned dose of N:P:K fertilizer can be given as the 1st dose.
1) Arecanut:- 50:20:70 gm per tree. 2) Black pepper:- 50:20:70 gm per vine. 3) Banana: 90:54:113 gm per plant. 4) Coconut: 250:165:600 gm per tree. 5) Cardamom: 250:60:60 gm per tree.

Veterinary

- Animals to be screened for nasal discharge, wound and injuries regularly and the services of veterinary doctor be taken for treatment
- Animals to be dewormed with suitable anti-helmentic drug and be checked and treated for ecto-parasites, if any

COASTAL ZONE, BRAMHAVAR

UDUPI/DAKSHINA KANNADA :

NOT YET RECEIVED