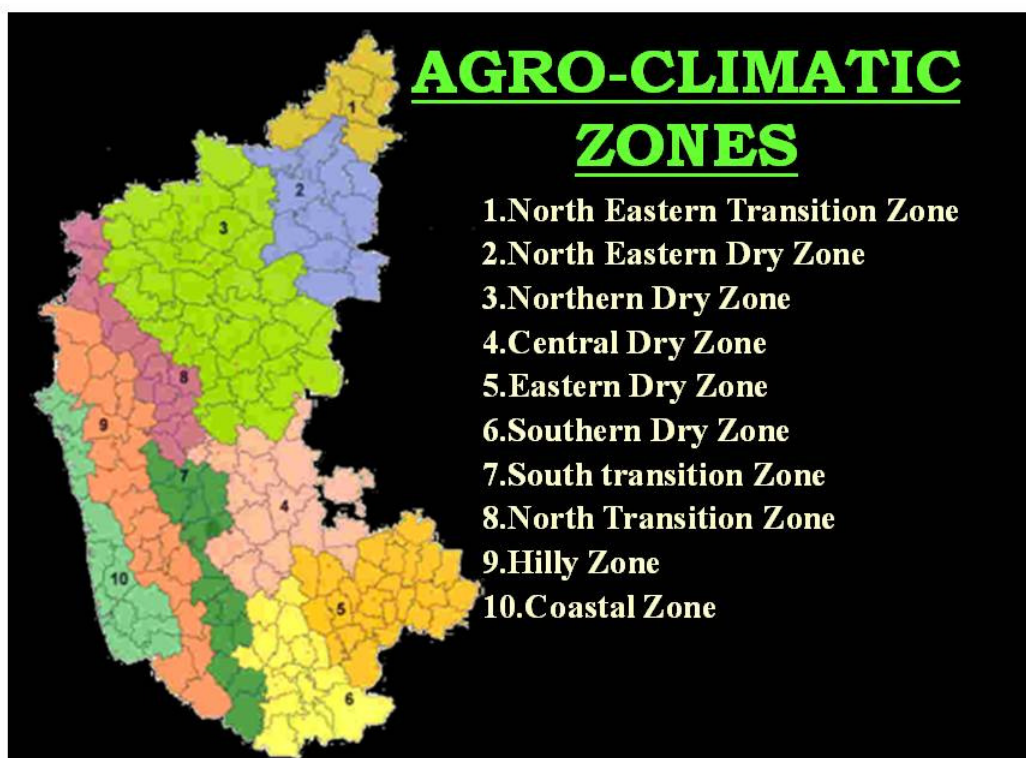


**COMPOSITE BULLETIN OF AGROMETEOROLOGICAL ADVISORY  
KARNATAKA STATE**

**ISSUED BY METEOROLOGICAL CENTRE, BENGALURU (IMD)  
IN COLLABORATION WITH  
STATE AGRICULTURE DEPARTMENT &  
AGRICULTURAL UNIVERSITIES OF KARNATAKA  
FOR THE PERIOD 28<sup>TH</sup> JUNE TO 02<sup>ND</sup> JULY 2017  
ISSUED ON TUESDAY, THE 27<sup>TH</sup> JUNE 2017**

**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 23<sup>rd</sup> June, **Southwest Monsoon was weak over the State.**

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

On 24<sup>th</sup> June,

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

On 25<sup>th</sup> June, **Southwest Monsoon was active over Coastal Karnataka.**

**Rainfall occurred at many places over North Interior Karnataka and at a few places over South Interior Karnataka.**

On 26<sup>th</sup> June, **Southwest Monsoon was active over Coastal Karnataka.**

**Rainfall occurred at a few places over Interior Karnataka.**

## **State Rainfall forecast:**

### **Day 1 valid until 0830 hrs IST of June 28<sup>th</sup>:**

Rain/showers likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka.

### **Day 2 valid until 0830 hrs IST of June 29<sup>th</sup>:**

Rain/showers likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka.

### **Day 3 valid until 0830 hrs IST of June 30<sup>th</sup>:**

Rain/showers likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka.

### **Day 4 valid until 0830 hrs IST of July 01<sup>st</sup>:**

Rain/showers likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka.

### **Day 5 valid until 0830 hrs IST of July 02<sup>nd</sup>:**

Rain/showers likely to occur at most places over Coastal Karnataka and at many places over Interior Karnataka.

## **Heavy rainfall Warning:**

### **Day 1 valid until 0830 hrs IST of June 28<sup>th</sup>:**

Heavy to very heavy rain likely to occur at isolated places over Dakshina Kannada, Udupi, Uttara Kannada districts of Coastal Karnataka. Heavy rain is also likely to occur at isolated places over Belagavi, Bidar, Kalaburgi, Yadgir districts of North Interior Karnataka and Kodagu, Shivamogga, Chikkamagaluru, Hassan districts of South Interior Karnataka.

### **Day 2 valid until 0830 hrs IST of June 29<sup>th</sup>:**

Heavy to very heavy rain likely to occur at isolated places over Dakshina Kannada, Udupi, Uttara Kannada districts of Coastal Karnataka. Heavy rain is also likely to occur at isolated places over Kodagu, Shivamogga, Chikkamagaluru, Hassan districts of South Interior Karnataka.

### **Day 3 valid until 0830 hrs IST of June 30<sup>th</sup>:**

Heavy rain likely to occur at isolated places over Dakshina Kannada, Udupi, Uttara Kannada districts of Coastal Karnataka and Kodagu, Shivamogga, Chikkamagaluru, Hassan districts of South Interior Karnataka.

### **Day 4 valid until 0830 hrs IST of July 01<sup>st</sup>:**

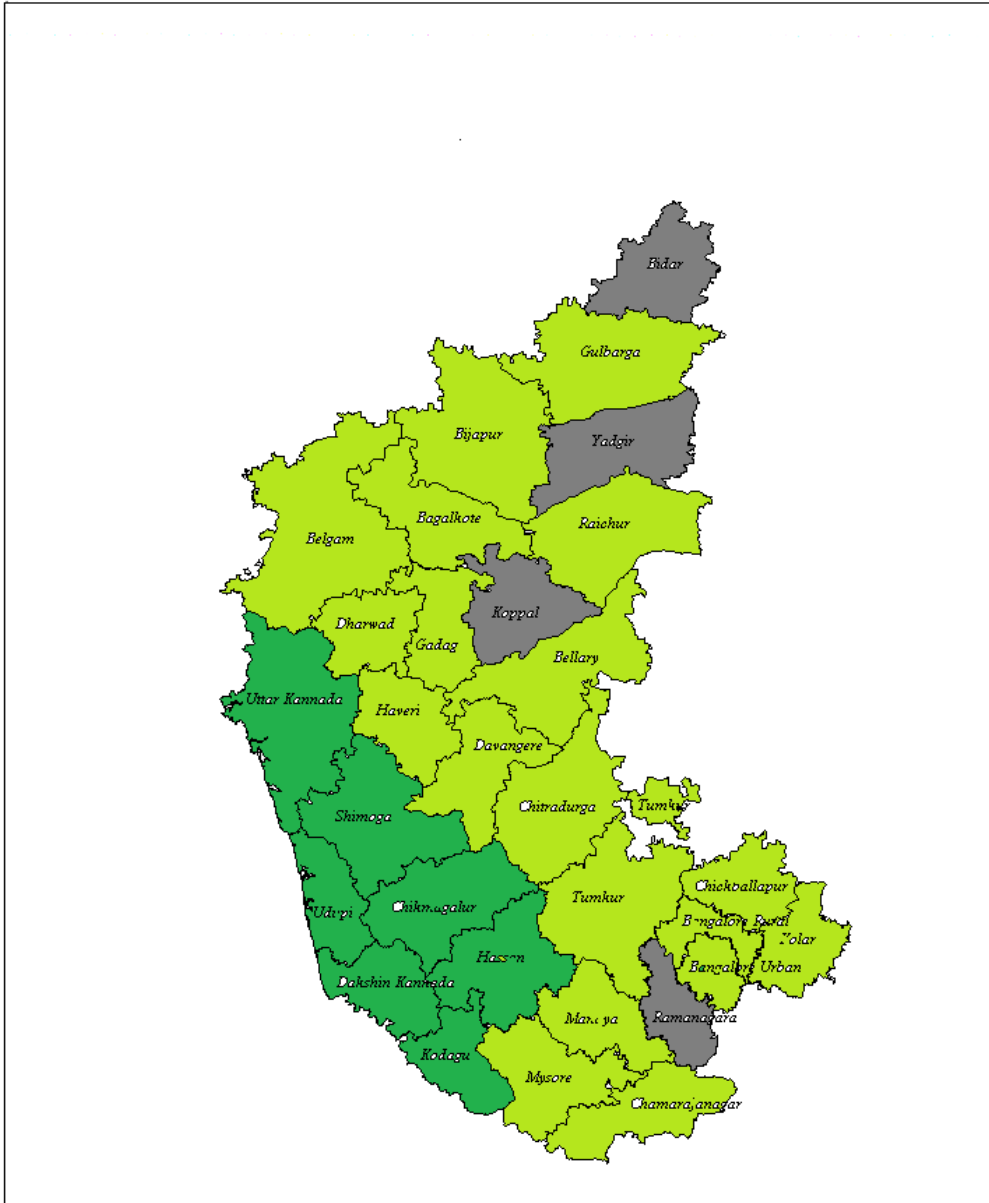
Heavy rain likely to occur at isolated places over Dakshina Kannada, Udupi, Uttara Kannada districts of Coastal Karnataka and Kodagu, Shivamogga, Chikkamagaluru, Hassan districts of South Interior Karnataka.

### **Day 5 valid until 0830 hrs IST of July 02<sup>nd</sup>:**








Heavy to very heavy rain likely to occur at isolated places over Dakshina Kannada, Udupi, Uttara Kannada districts of Coastal Karnataka. Heavy rain is also likely to occur at isolated places over Kodagu, Shivamogga, Chikkamagaluru, Hassan districts of South Interior Karnataka.

**Outlook:** No large change is expected over the State

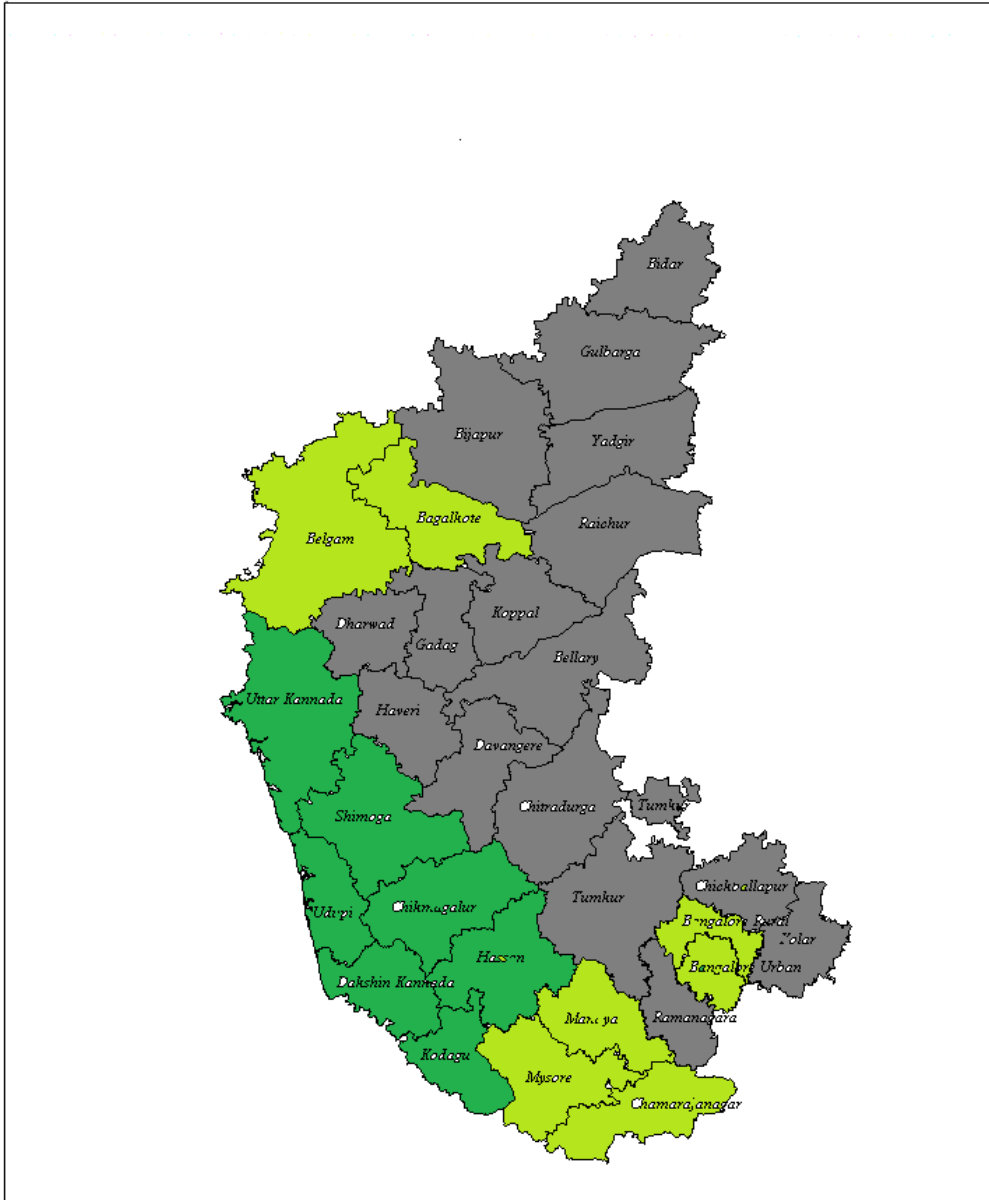
**Rainfall forecast for the next 5 days:**  
**28.06.2017 – 29.06.2017:**




**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				

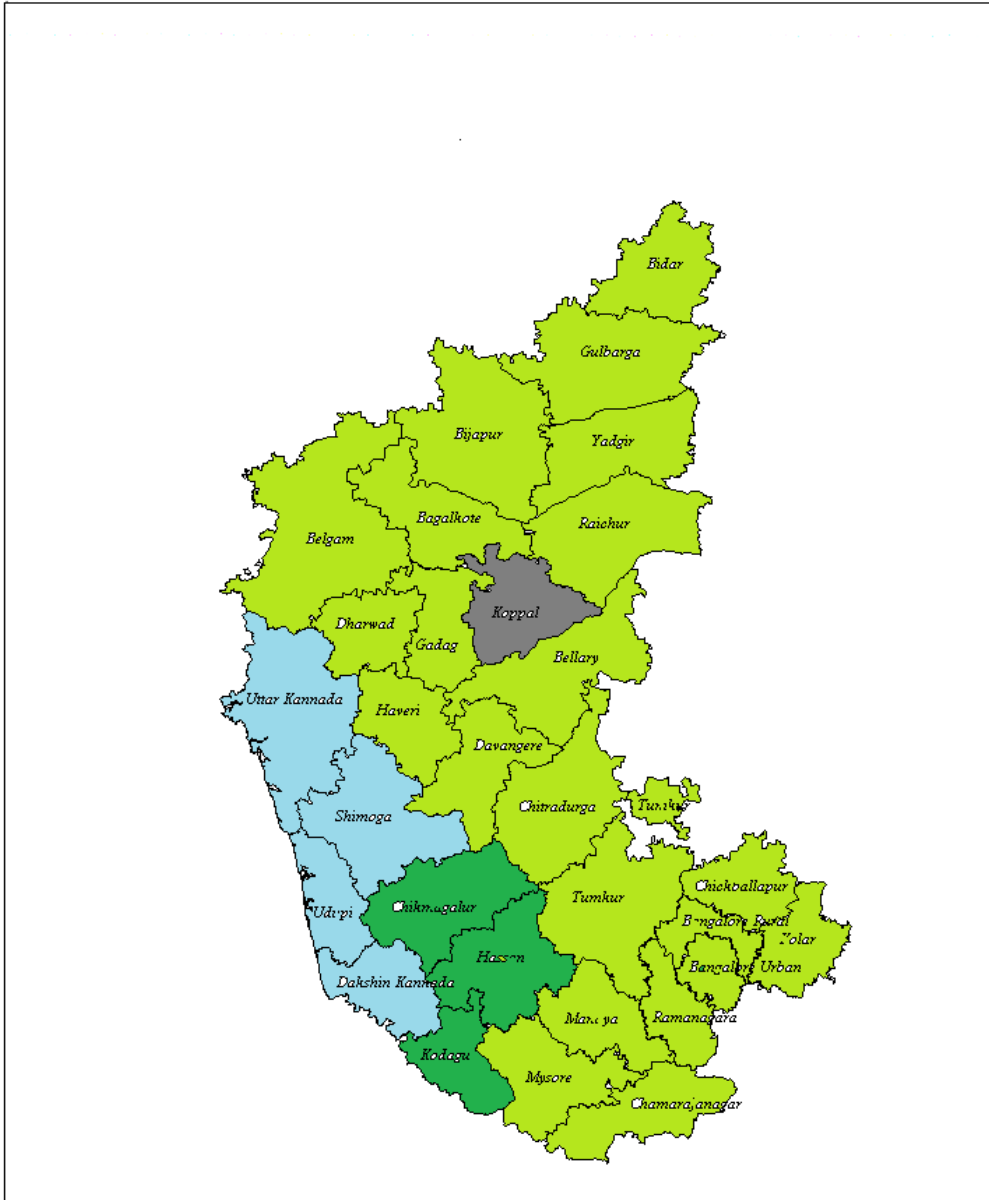
**30.06.2017 – 01.07.2017:**








**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				

**02.07.2017:**



**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				

## 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			
Chamarajnaragar			
Kodagu			
Mandya			
Mysuru			
Hassan		Sp	
Shivamogga		Sp	
Chikkamagaluru		Sp	
Belagavi	FD		FD
Dharwad	FD		FD

Haveri	FD		FD
Uttara Kannada		S	
Dakshina Kannada			
Udupi			

## **HORTICULTURAL CROPS**

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



Belagavi														
Dharwad														
Haveri														
Uttara Kannada														
Dakshina Kannada														
Udupi														

## **CROPS**

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

Belagavi	S					S								S
Dharwad	S					S								S
Haveri	S					S								S
Uttara Kannada										S			T	
Dakshina Kannada										S				
Udupi										S				

## LEGEND

**CROP/VEGETABLE NAMES:** GN-Groundnut, M-Maize, AN-Areca nut, COP-Cowpea, BG-Black Gram, GG-Green Gram, RG-Red Gram, SC-Sugarcane, 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; TU:Turmeric WH -wheat

## CROP STAGES

**NP:** Nursery Preparation; ; **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

## ADVISORIES

### NORTH EAST TRANSITION ZONE, BIDAR

#### BIDAR

Main crops	Stage	Agricultural Advisories
General		<ul style="list-style-type: none"> <li>• Take up sowing of greengram, blackgram, Jowar (DSV – 2) and soybean first and then sowing of pigeonpea (BSMR 736, TS-3R).</li> <li>• Take up fresh plantation of fruit trees, teak, neem, tamarind, acacia or other trees which are useful to prepare the agricultural implements on the bunds, uncultivated and marginal land.</li> <li>• Take up the repair of bunds and check dam so as to reduce the runoff and to check the soil erosion.</li> </ul>
Soybean	Sowing	<ul style="list-style-type: none"> <li>• Farmers are advised for sowing of soybean with recommended seed rate of 30 kg per acre and treat the seeds with 500g Rhizobium.</li> <li>• Sow the seeds with the spacing of 30 cm x 10 cm</li> <li>• Apply the recommended fertilizer at the time of sowing (16:32:10 kg NPK per acre.</li> <li>• After sowing go for spraying of Alachlor 50 E.C (1.5 liter per acre) or Chlorimuron 25 EC (15g per acre) herbicide in 300 liter of water to control the weeds.</li> </ul>
Green gram	Sowing	<ul style="list-style-type: none"> <li>• Farmers are advised for sowing of Green gram with recommended seed rate of 5 kg per acre</li> <li>• Soak the seeds of greengram in a solution of 20g Calcium chloride dissolved in water for half an hour and dry in shade before sowing.</li> <li>• After treating with calcium chloride. Treat with rhizobium biofertiliser before sowing (200 grams for the seeds required for one acre)</li> <li>• Sow the seeds with the spacing of 30 cm x 10 cm</li> <li>• Apply the recommended fertilizer at the time of sowing (10:20 kg NP per acre.</li> </ul>
Blackgram	Sowing	<ul style="list-style-type: none"> <li>• Farmers are advised for sowing of black gram with recommended seed rate of 5 kg per acre</li> <li>• Soak the seeds of blackgram in a solution of 20g Calcium chloride dissolved in water for half an hour and dry in shade before sowing.</li> <li>• After treating with calcium chloride. Treat with rhizobium biofertiliser before sowing (200 grams for the seeds required for one acre)</li> <li>• Sow the seeds with the spacing of 30 cm x 10 cm</li> <li>• Apply the recommended fertilizer at the time of sowing (10:20 kg NP per acre.</li> <li>• After sowing go for spraying of Alachlor 50 E.C (1.5 liter per acre) or Fluchloralin 45 EC (1.2 liter per acre) in 400 liter of water to control the weeds.</li> </ul>
Jowar	Sowing	<ul style="list-style-type: none"> <li>• Farmers are advised for sowing of Jowar with seed rate of 2.5-3 kg per acre</li> <li>• Soak the seeds of Jowar in a solution of 30g Calcium chloride dissolved in water for an hour and dry in shade before sowing.</li> <li>• Sow the seeds with the spacing of 45 cm x 15 cm</li> <li>• Apply the recommended fertilizer at the time of sowing (20:30:14 kg NPK per acre.</li> <li>• After sowing go for spraying of Attrazin 50 W.P. (400 g per acre) in 400 liter of water to control the weeds.</li> </ul>

Pigeonpea	Sowing	<ul style="list-style-type: none"> <li>• Farmers are advised for sowing of Pigeonpea with seed rate of 5 kg per acre. Treat with rhizobium biofertiliser before sowing (200 grams for the seeds required for one acre)</li> <li>• Soak the seeds of Pigeonpea in a solution of 20g Calcium chloride dissolved in water for half an hour and dry in shade before sowing.</li> <li>• Sow the seeds with the spacing of 90 cm x 30 cm</li> <li>• Apply the recommended fertilizer at the time of sowing (10:20:50 kg NPK per acre.</li> <li>• After sowing go for spraying of Alachlor 50 E.C (1.5 liter per acre) or Pedimethalin 30 EC (1.2 liter per acre) in 400 liter of water to control the weeds.</li> </ul>
Fruit crops	--	Make basins and give chemical fertilizer to the fruit crops
Animal husbandry		<ul style="list-style-type: none"> <li>• Vaccinate the live stock for Black Quarter and foot and mouth diseases.</li> </ul>

### NORTHEASTERN DRY ZONE, RAICHUR

### KALABURGI/ YADGIRI/ RAICHUR/ KOPPAL/ BALLARI

crops	Stage	Agricultural Advisories
Sorghum/ Bajra	sowing	On the day of sowing or day after taken up spraying of weedicide 0.4 kg Atrazine 50WP in 300 liters of water for one acre
Maize	sowing	For effective control of weeds on the day of sowing or day after taken up spraying of weedicide 1 kg Atrazine 50WP or 0.5 kg Atrazine 50WP along with 1 liter Pendimethalin 30EC in 300 liters of water for one acre
Greengram	sowing	On the day of sowing or day after taken up spraying of weedicide 1.3 liter Pendimethalin 30EC in 300 liters of water for one acre
Redgram	sowing	On the day of sowing or day after taken up spraying of weedicide 1.3 liter Pendimethalin 30EC or 900 ml Alachlor in 300 liters of water for one acre
Blackgram	sowing	Maintenance of weed free is a must in blackgram so on the day of sowing or day after taken up spraying of weedicide 0.8 liter Fluchloraline 45 EC or 1.2 liter Alachlor 50EC in 300 liters of water for one acre
groundnut	sowing	For effective control of weeds on the day of sowing or day after taken up spraying of weedicide 1.2 liter Alachlor 50EC or 1.3 liter Pendimethalin 30 EC or 0.4 liter Metalachlor 50EC in 300 liters of water for one acre
soybean	sowing	On the day of sowing or day after taken up spraying of weedicide 1.6 liter Alachlor 50EC or 0.8 liter Chlomazone 50EC or 15 gm Chlorimuron 25WP or 1.3 Pendimethalin 30EC in 300 liters of water for one acre
castor	sowing	On the day of sowing or day after taken up spraying of weedicide 800 ml Fluchlorine 45 EC or 1000 ml Alachlor in 300 liters of water for one acre
sesame	sowing	For effective control of weeds on the day of sowing or day after taken up spraying of weedicide Alachlor 600 ml in 300 liters of water for one acre
cotton	sowing	On the day of sowing or day after taken up spraying of weedicide 500 gm Diuron 80WP or 2 liter Pendimethalin 30EC or 700 ml Pendimethalin 38.7CS in 300 liters of water for one acre
chilli	sowing	On the day of sowing or day after taken up spraying of weedicide 800 ml Butachlor 50EC for direct seeded chilli and for transplanted 1 liter Pendimethalin 30EC in 300 liters of water for one acre

**NORTHERN DRY ZONE, VIJAYAPURA**

**VIJAYAPURA/ BAGALKOTE**

**NOT YET RECEIVED**

**GADAG**

**NOT YET RECEIVED**

**CENTRAL DRY ZONE, HIRIYUR**

**CHITRADURGA/DAVANGERE/TUMKURU**

<b>Groundnut, Red gram</b>	Wherever rainfall received, suggested to take up sowing across the slope. Wherever crop is 30 days old farmers are advised to go for make dead furrow at a distance of 10 mt. to conserve the ensuing rainfall. Under rainfed condition farmers are advised to take up drought tolerant measures like use of Microbial consortia ( Rhizobium, PSB, Pseudomonas and Azospirillum.
<b>Onion</b>	Suggested to take up hand weeding
<b>Horticulture crops</b>	Since Medium shower expected for coming 5 days with hold irrigation or light irrigation is advisable
<b>Green gram, Sesamum and Maize</b>	Advised to go for intercultural operation
<b>Cotton</b>	Since cloudy weather expected for coming 5 days, flower may drop in cotton suggested to take up spray planofix

**EASTERN DRY ZONE, BENGALURU**

**BENGALURU URBAN/ BENGALURU RURAL/RAMANAGARA/ CHIKBALLAPURA/ KOLAR**

<b>Crop</b>	<b>Stage/ Condition</b>	<b>Pest and Disease</b>	<b>Agro advisories</b>
<b>Agriculture crop</b>			
<b>Kharif crops</b>	<p>Aaridra rainstar starts from June 22<sup>nd</sup> to July 5<sup>th</sup> . The normal rainfall of Aaridra rainstar is 33.0 mm. Farmers are advised to utilize the rain water for sowing of kharif crop sowing.</p> <p>Due to high humidity (warm and humid weather) possibility of pest and disease build up is more in already sown crop. Take prophylactic measures depending on the crop.</p> <p>Since there is a deficit rainfall during this month, protective irrigation may be given for the crop sown in the pre-monsoon shower.</p> <p>Agro forestry on the bund involving <i>Melia dubia</i> (Hebbevu), Silver oak and Causurina is recommended for sustainable income under abnormal extreme rainfall events</p> <p>Before sowing take up land preparation and strengthen the bund which will facilitate conservation of rainwater of monsoon showers.</p> <p>Wherever sowing has not been undertaken, FYM, tank silt application may be made before sowing.</p> <p>Ploughing across the slope will make <i>in situ</i> soil moisture conservation and take up land leveling so that more rain water is conserved in the soil.</p> <p>The farmers are advised to procure good quality of seeds and fertilizers. Take up the germination test for Kharif sowing.</p>		

	<p>The following crops are suggested for sowing in this month</p> <p><b>Under monocropping the long duration crops:</b>  Redgram : TTB-7, BRG-1,2,4&amp;5  Castor: DCS-9 (Jyothi), DCH-177&amp;32</p> <p><b>Under double cropping the short duration crops:</b>  Ragi : Indaf -8, ML-365 , MR-1,2 and 6,GPU-48&amp;66  Maize: Ganga-11, Deccan -103, Vijaya composite, Composite NAC-6004,6002, Hybrid-Nityashree ( NAH-2049)  Groundnut : TMV-2, JL-24, KCG-6 &amp; 2</p>
<b>Horticulture crop</b>	
<b>Mango</b>	<p>Taken up summer plough to expose the soil to kill the different stages of insect.  Wherever the crop has been harvested, weeding may be undertaken under the canopy.  Canopy thinning is suggested for proper penetration of sunlight.</p>
<b>Animal Husbandry</b>	
	<p>Maintain optimum room temperature in poultry and sericulture unit.  Vaccinate the cow against the Foot and Mouth Disease (FMD) &amp; Black Quarter.  Poultry shed is recommended to construct in East-West direction to avoid rainfall and high temperature.</p>
<b>Integrated Farming System (IFS)</b>	<p>Fish culture can be undertaken in the rainwater storage structure like farm pond, check dam and nala bund by releasing the fingerlings.</p>

### SOUTHERN DRY ZONE, NAGANAHALLI

#### MYSURU/MANDYA/CHAMARAJNAGARA / KODAGU

Crop / Animals	Stage/ Condition	Pest and Disease	Agro advisories
			Treat the ragi seeds with saaf 4g/kg of seeds,if the farmers using local seeds then go for seed treatment with salt water in 1;4 ratio then take up sowing
			The ragi varieties recommended for the month of juneIndof-8,MR-1and MR-2
			Due to cloudy weather,high humidity and low temperature incidence of thrips and whiteflies menace was noticed In cowpea,black gram and green gram .To control this pest spray with Rogar-1.7ml per liter of water,mix the spraying solution with sopic adhesive,in case there is light rainfall
			Wilt disease is noticed in brijal crop, To manage this disease by uprooting of affected plants and drench the affected site with 20 gm bleaching powder dissolved in 1 litre of water or spray 3gm carbon oxy chloride+500gm streptomycin sulphate per ltr of water
			Maintain the optimum room temperature in Sericulture, Poultry and Dairy unit.

### SOUTHERN TRANSITION ZONE, NAVILE, SHIVAMOGGA

#### SHIVAMOGGA/HASSAN/CHIKKAMAGALURU

Crops/ Components	Stage / Condition	Pest and Disease	Agro advisories
General			Go for sowing of maize, ragi, redgram and groundnut by using certified seeds.
<b>Paddy</b>	Land preparation/ Nursery	-	Go for sowing of green manuring crops wherever paddy growing area is available. Go for nursery preparation and sowing.
<b>Maize</b>	Sowing	-	Go for sowing of maize 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.
<b>Areca nut</b>	Flowering/ fruit setting stage	Leaf spot	Spray Mancozeb @ of 2 g/lit or copper oxychloride at 3g/lit
		Yellow leaf disease	Physical condition of the soil should be improved by deep digging and adding sand/organic matter. In heavy sticky soils, gypsum @ 500 kg / ha may not be incorporated, once in two years prior to normal fertilizer application. Adequate drainage should be provided, especially during monsoon season. Phyto-sanitary and plan-protection measures should be adopted to control Anabe, bud rot, spindle bud and mite infestation. Sun-scorching of the stem should be avoided by covering with arecanut leaves or painting with lime slurry. Application of NPK fertilizers as per schedule along with lime and zinc @ 8.5 g each per palm.
		Mites	Keep 10 g of Phorate granules in inflorescence of arecanut plant
		Inflorescence bug	Place the 10 g Phorate granules in small polythene bag and keep inside the inflorescence part of arecanut
		Stem bleeding	Improving the drainage may help in minimizing its incidence. Scooping out the affected portions and application of coal tar or Bordeaux paste @ 1% is effective to reduce the incidence.
		Anabe roga (Ganoderma)	Pouring of 0.3% of Calixin in 15-20 litre of water at three month intervals or root feeding of 1.5% calixin solution or drench Hexaconazole (Contof) solution @ 1 ml/lit.
		Inflorescence dieback	Recommended to spray of Carbondizim 2 g or Mancozeb 2 g/litre of water
		Bacterial leaf blight	Avoid nitrogen application Spray 2.0 g/litre copper oxychloride along with 0.5 g/ liter Streptocycline at 20 days of interval
		Bud rot	For infected plant use 10 Bordeaux paste @ or 3 percent copper oxychloride after cleaning of infected part by using clean water.
		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
<b>Coconut</b>	Flowering/ fruit setting 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.
<b>Ginger/ Turmeric</b>	sprouting	Leaf eating caterpillar	Advised to go for spraying Dimethoate 30 EC @ 1.7 ml or 2 ml Melathion 50 EC/litre of water
<b>Banana</b>	-	Leaf spot/Sigatoka	As a precautionary measure spray carbendizim + mancozeb (SAAF) @ 2.0 g / litre of water followed by (15 days after) chlorothalanyl @ 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 Carbondizim 0.2% or Propiconazole 0.5 ml/ litre once in a month.
<b>Sugarcane</b>	Tillering	Leaf spot	Spray copper oxychloride @ 2.5 g or Mancozeb @ 2 g/ litre of water at 8, 12, 16 and 20 <sup>th</sup> week after sowing by using 300 litre of solution per acre.

	Termites	Identify & kill the queen termite, maintain adequate moisture to avoid attack of termites Drenching of Chloropyriphos 20 EC @ 5 ml/litre of water at infected spots.
	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.
	Yellow mosaic virus	Uproot the infected plants and burn it.

## NORTH TRANSITION ZONE, DHARWAD

### BELAGAVI/DHARWAD/HAVERI

- After receipt of rain looking to the soil moisture condition Kharif sowings may be taken up.
- Sowing of Green gram/Black gram may be taken up where the soil moisture is favorable (varieties: Green gram: DGGV-2, Black gram: DU-1, DBGV-5, Soybean:Dsb-21, JS-335, Groundnut: G 2-52, GPBD-4 and Redgram:TS3R.)

<b>Green gram</b>	<ul style="list-style-type: none"> <li>• Sowing may be taken up where condition is favorable.</li> <li>• Seeds:12-15 kg/ha</li> <li>• Fertilizer: 25:50:0 N:P Kg/ha.</li> <li>• Use Rhizobium 500gm/ha and PSB 1250gm/ha.</li> </ul>
<b>Blackgram</b>	<ul style="list-style-type: none"> <li>• Sowing may be taken up where condition is favorable.</li> <li>• Seeds:15-18 kg/ha</li> <li>• Fertilizer: 25:50:0 N:P Kg/ha.</li> <li>• Use Rhizobium 500gm/ha and PSB 500 gm/ha.</li> </ul>
<b>Soybean/</b>	<ul style="list-style-type: none"> <li>• Sowing may be taken up where condition is favorable.</li> <li>• Seeds:62-65 kg/ha</li> <li>• Fertilizer: 40:80:25 N:P:K, Kg/ha.</li> <li>• Use Rhizobium 1250gm/ha and PSB 1250 gm/ha.</li> </ul>
<b>groundnut</b>	<ul style="list-style-type: none"> <li>• Sowing may be taken up where condition is favorable.</li> <li>• Seeds:125 to 150 kg/ha.</li> <li>• Fertilizer: 25:50:25 N:P:K, Kg/ha. 25 Kg extra P for Irrigated Condition.</li> <li>• Seed treatment with Rhizobium 2.5 kg/ha and PSB 2.5 kg/ha</li> </ul>
<b>Sugarcane</b>	<ul style="list-style-type: none"> <li>• Apply 25 tons of FYM/2.5 tons of Vermi compost 2-3 weeks before planting.</li> <li>• Fertilizer: Nitrogen:250 kg (10% at the time of sowing, 20% at 6th week after planting, 30% at 10th week, remaining 40% at 14th week after planting.</li> <li>• Application of sulphur in the form of Gypsum @ 500 kg /ha to sulphur deficient soils to increase the cane yield and juice quality.</li> </ul>
<b>Chilli/Tomato Brinjol</b>	<p><b><i>Pest and Diseases management in Tomato</i></b></p> <ul style="list-style-type: none"> <li>• <b>If the Crop is at fruit initiation to fruit development stage.</b></li> <li>• Tomato If fruit borer is noticed- spray Thiodicarb 1gm 75WP per litre of water.</li> <li>• Growing of one line Radish in every two lines of Tomato Reduces the fruit rot in tomato.</li> <li>• At flowering stage spray NAA 50ppm @5ml in 100 litre of water to reduce flower dropping.</li> <li>• For control of Shoot &amp; Fruit borer in brinjol Collect and destroy the damaged tender shoots, Fallen fruits and Spray Carbaryl 50% WP 2g/litre + wettable Sulphur 50% WP 2g/litre of water.</li> </ul>
<b>Animals</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Proper ventilation should be maintained for free circulation of air in the sheds.</li> </ul>



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|--|---|--|
|  | <ul style="list-style-type: none"><li>• Maintain optimum moisture of 60 to 70 per cent in vermin compost pits and drain out the excess water from the vermipits.</li><li>• Farmers are advised to keep the animal habitation dry to avoid hoof infection &amp; to prevent fly breeding.</li></ul> |  |
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**HILL ZONE, SIRSI**

**UTTARA KANNADA**  
**NOT YET RECEIVED**

**COASTAL ZONE, BRAMHAVAR**

**UDUPI/DAKSHINA KANNADA**  
**NOT YET RECEIVED**