



**India Meteorological Department  
(Ministry of Earth Sciences)**

**NATIONAL BULLETIN NO. 14 (LAND/02/2024)**

**TIME OF ISSUE: 2030 HOURS IST**

**DATED: 27.08.2024**

**FROM: INDIA METEOROLOGICAL DEPARTMENT (FAX NO. 24643965/24699216/24623220)**

**TO: CONTROL ROOM, NDM, MINISTRY OF HOME AFFAIRS (FAX.NO. 23093750)**

**CONTROL ROOM NDMA (FAX.NO. 26701729)**

**CABINET SECRETARIAT (FAX.NO.23012284, 23018638)**

**PS TO HON'BLE MINISTER FOR S & T AND EARTH SCIENCES (FAX NO.23316745)**

**SECRETARY, MOES (FAX NO. 24629777)**

**H.Q. (INTEGRATED DEFENCE STAFF AND CDS) (FAX NO. 23005137/23005147)**

**DIRECTOR GENERAL, DOORDARSHAN (23385843)**

**DIRECTOR GENERAL, AIR (23421105, 23421219)**

**PIB MOES (FAX NO. 23389042)**

**UNI (FAX NO. 23355841)**

**D.G. NATIONAL DISASTER RESPONSE FORCE (NDRF) (FAX NO. 26105912, 2436 3260)**

**DIRECTOR, PUNCTUALITY, INDIAN RAILWAYS (FAX NO. 23388503)**

**CHIEF SECRETARY, ODISHA (FAX NO. 0674-2536660)**

**CHIEF SECRETARY, WEST BENGAL (FAX NO. 033-22144328)**

**CHIEF SECRETARY, JHARKHAND (FAX NO. 0651-2400255)**

**CHIEF SECRETARY, BIHAR (FAX NO. 0612-2217085)**

**CHIEF SECRETARY, MADHYA PRADESH (FAX NO. 0755-2441076)**

**CHIEF SECRETARY, RAJASHTHAN (FAX NO. 0141-2227114)**

**CHIEF SECRETARY, MAHARASHTRA (FAX NO. 022- 22028594)**

**CHIEF SECRETARY, GUJARAT (FAX NO. 079-23250305)**

**CHIEF SECRETARY, DAMAN & DIU (FAX NO. 0260-2230775)**

**CHIEF SECRETARY, DADRA & NAGAR HAVELI (FAX NO. 0260-2645466)**

**CHIEF SECRETARY, GOA (FAX NO. 0832-2415201)**

**Sub: (a) Deep Depression over Saurashtra & Kachchh and adjoining north Gujarat**

The deep depression over north Gujarat moved nearly westwards with a speed of 12 kmph during past 6 hours and lay centered at 1730 hours IST of today, the 27th August over Saurashtra & Kachchh and adjoining north Gujarat near latitude 23.7°N and longitude 71.0 °E, about 40 km east-northeast of Rapar (Gujarat), 100 km northeast of New Kandla (Gujarat), 130 km east-northeast of Bhuj (Gujarat) and 220 km east-northeast of Naliya (Gujarat).

It is likely to move slowly west-southwestwards across Saurashtra & Kachchh region and reach Saurashtra & Kachchh coast & adjoining areas of Pakistan and northeast Arabian Sea by morning of 29th August.

**(b) Low Pressure Area over southeast Uttar Pradesh and adjoining northeast Madhya Pradesh**

The low pressure area over northwest Jharkhand and neighbourhood moved west-northwestwards and lay over southeast Uttar Pradesh and adjoining northeast Madhya Pradesh at 1730 hours IST of today, the 27<sup>th</sup> August 2024. It is likely to continue to move west-northwestwards across northeast Madhya Pradesh and weaken gradually during next 24 hours.

## **Warnings:**

### **(i) Rainfall Warning:**

#### **Gujarat State:**

**(a) Saurashtra & Kutch:** Light to moderate rainfall at most places with heavy to very heavy rainfall at a few places and extremely heavy rainfall at isolated places is likely on 27<sup>th</sup> & 28<sup>th</sup> August; heavy to extremely heavy at isolated places on 29<sup>th</sup> August and heavy rainfall at isolated places on 30<sup>th</sup> August.

**(b) Gujarat region:** Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places is very likely 27<sup>th</sup> August and light to moderate rainfall at many places with heavy rainfall at isolated places on 28<sup>th</sup> August.

**South Rajasthan:** Light to moderate rainfall at many places with heavy rainfall at isolated places is very likely on 27<sup>th</sup> and 28<sup>th</sup> August.

**Madhya Maharashtra:** Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places on 27<sup>th</sup> and heavy rainfall at isolated places is likely on 28<sup>th</sup> August.

**Konkan & Goa:** Light to moderate rainfall at most places with heavy to very heavy rainfall at isolated places on 27<sup>th</sup> and heavy rainfall at isolated places is likely on 28<sup>th</sup> August.

**Odisha:** Light to moderate rainfall at most places with heavy rainfall at isolated places is likely during 27<sup>th</sup> to 28<sup>th</sup> August and heavy to very heavy rainfall on 29<sup>th</sup> August.

**Gangetic West Bengal:** Light to moderate rainfall at most places with heavy rainfall at isolated places is likely on 27<sup>th</sup> August.

**Jharkhand:** Light to moderate rainfall at many places with heavy to very heavy rainfall at isolated places is likely on 27<sup>th</sup> and heavy rainfall at isolated places on 28<sup>th</sup> August.

**Bihar:** Light to moderate rainfall at many places with heavy rainfall at isolated places is likely during 27<sup>th</sup> to 28<sup>th</sup> August.

### **(ii) Wind warning:**

- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is very likely over the districts of North Gujarat region on 27<sup>th</sup> August; Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely over the districts of South Gujarat Region and Saurashtra & Kutch during 27<sup>th</sup>-29<sup>th</sup> August.
- Squally wind speed reaching 55-65 kmph gusting to 75 kmph is very likely to prevail along & off Gujarat coasts & adjoining Pakistan coasts and northeast & adjoining eastcentral Arabian Sea during 27<sup>th</sup>-30<sup>th</sup> August.
- Strong surface wind speed reaching 40-50 kmph gusting to 60 kmph is very likely to prevail over South Rajasthan on 27<sup>th</sup> August.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along and off north Maharashtra coasts on 27- 29<sup>th</sup> August.

### **(iii) Sea condition:**

- Squally weather with Rough to very Rough sea conditions is very likely to prevail along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts and Northeast & adjoining Eastcentral Arabian Sea till 30<sup>th</sup> August.

### **(iv) Fisherman warning:**

- Fishermen are advised not venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30<sup>th</sup> August.

**(v) Advisory for offshore/onshore Exploration and Production (E & P) Operators:**

The small ships and offshore -onshore E & P operators, shipping and port authorities along & off Gujarat & north Maharashtra Coasts and Northeast & adjoining Eastcentral Arabian Sea are advised to keep watch on developing weather and take necessary actions.

**(vi) Impact Expected**

- Localized Flooding of roads, water logging in low lying areas and closure of underpasses mainly in urban areas of the above region.
- Occasional reduction in visibility due to heavy rainfall.
- Reduction of visibility over sea area due to sea spray induced by strong wind and heavy rainfall.
- Disruption of traffic in major cities due to water logging in roads leading to increased travel time.
- Minor damage to kutcha roads.
- Possibilities of damage to vulnerable structure.
- Localized Landslides/Mudslides/landslips/mud slips/land sinks/mud sinks.
- Damage to horticulture and standing crops in some areas due to inundation.
- It may lead to riverine flooding in some river catchments (for riverine flooding please visit Web page of CWC)

**(v) Action Suggested**

- Fishermen are advised not to venture into Northeast & adjoining Eastcentral Arabian Sea and along & off Gujarat & adjoining Pakistan and north Maharashtra Coasts till 30th August.
- Judicious regulation of offshore/onshore Operations
- Judicious regulation of surface transports including railways and roadways.
- Check for traffic congestion on your route before leaving for your destination.
- Follow any traffic advisories that are issued in this regard.
- Avoid going to areas that face the water logging problems often.
- Avoid staying in vulnerable structure.

**(vi) Agromet advisories for Heavy Rainfall** likely over various Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra

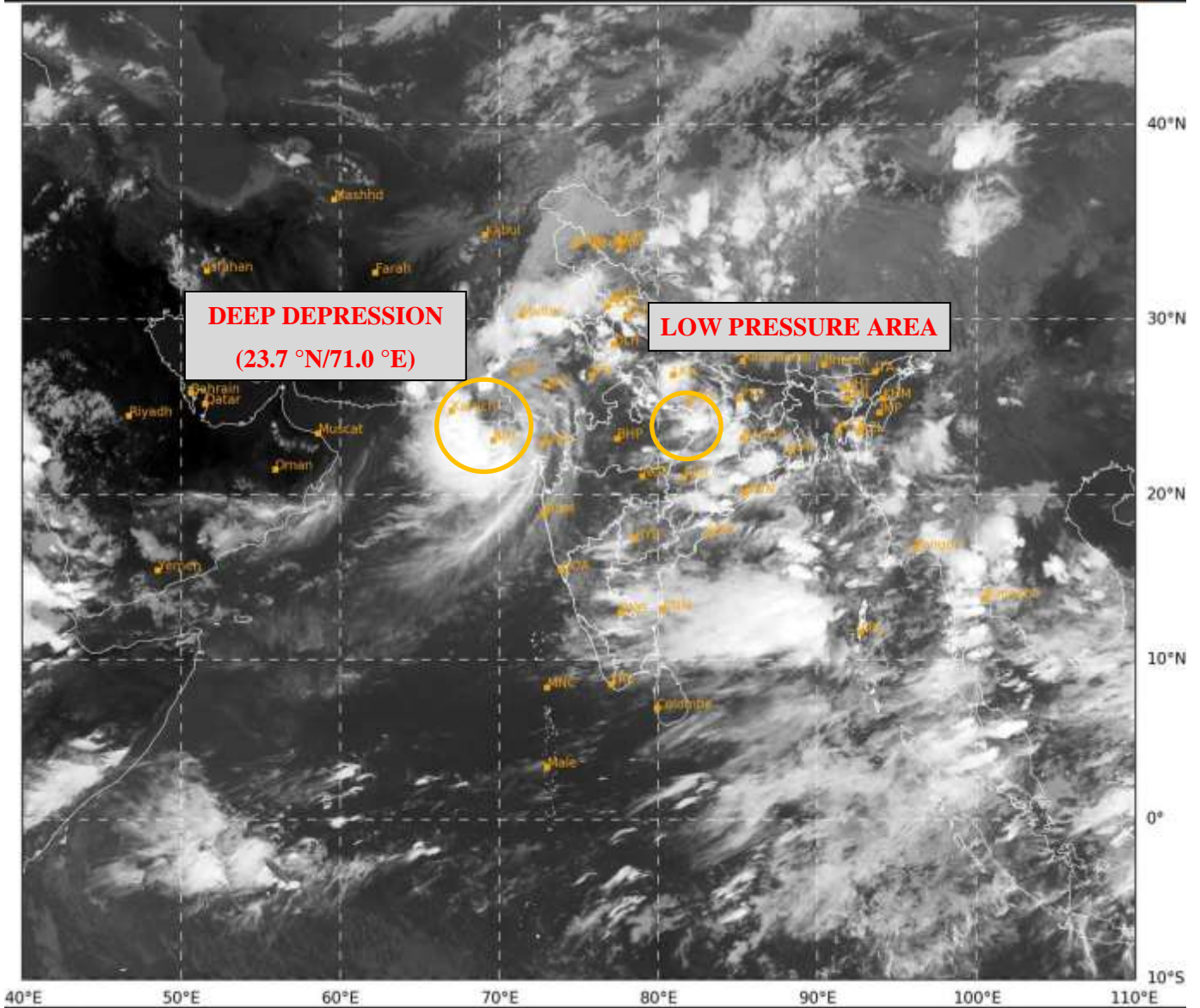
- Make provision for draining out excess water from crop fields to avoid water stagnation in Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra.
- Provide mechanical support to horticultural crops and staking to vegetables.

Significant Rainfall (in cm) recorded during past 24 hours till 0830 hours IST of today, the 27.08.2024 is placed at Annexure-1.

**Next bulletin will be issued at 0230 hours IST of tomorrow, the 28<sup>th</sup> August, 2024.**

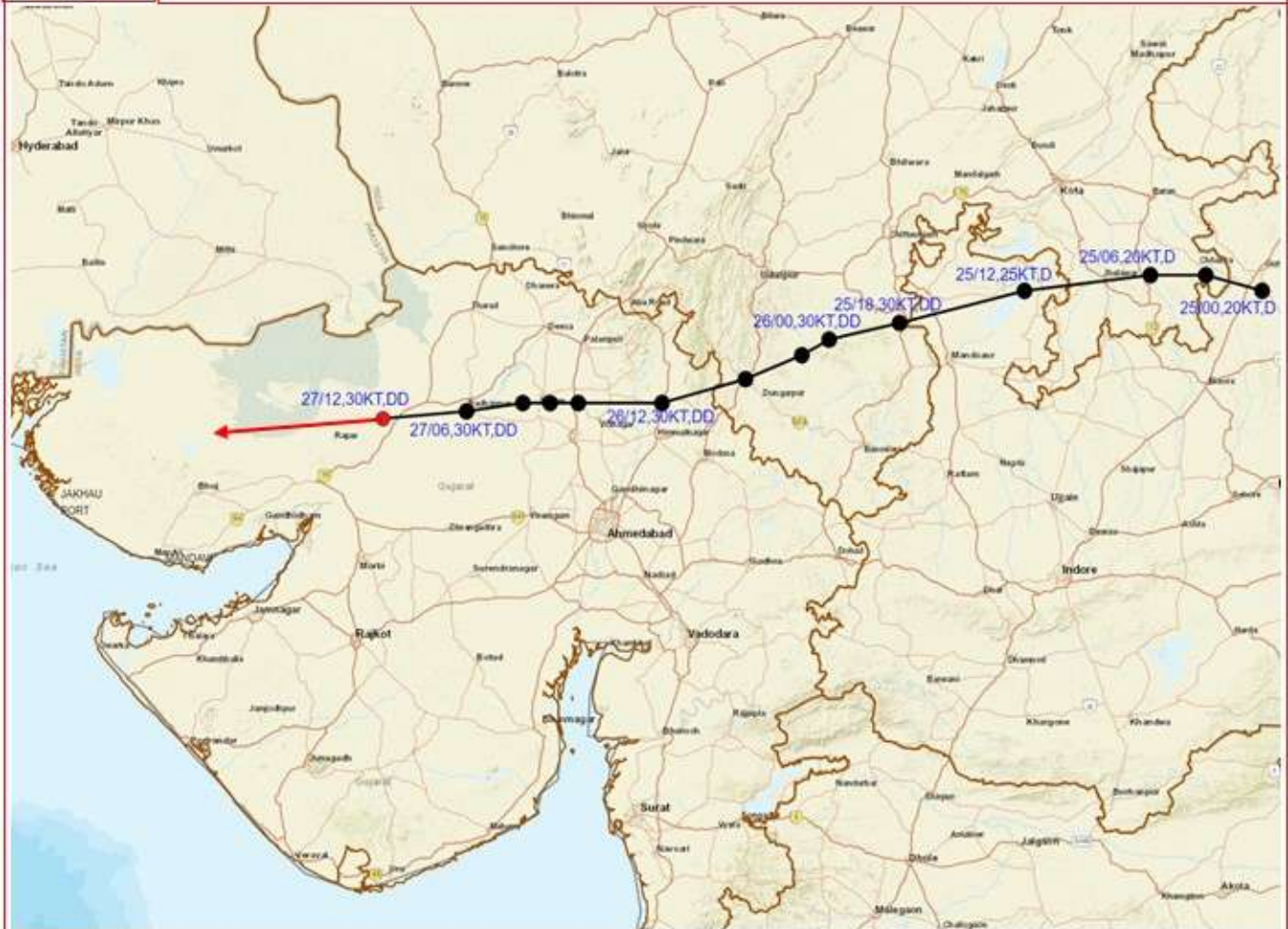
**(Dr. Ananda Kumar Das)**  
**Scientist F, Cyclone Warning, New Delhi**

*Copy to: ACWC Kolkata/ACWC Mumbai/RMC Mumbai/CWC Ahmedabad/MC Jaipur/RMC, Nagpur/MC, Bhopal//CWC Bhubaneswar/MC, Goa/MC, Ranchi*





**OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER SAURASHTRA & KACHCHH AND ADJOINING NORTH GUJARAT BASED ON 1200 UTC (1730 IST) OF 27<sup>TH</sup> AUGUST, 2024.**



DATE/TIME IN UTC

IST=UTC + 0530

L: LOW PRESSURE AREA

WML: WELL MARKED LOW PRESSURE AREA

D: DEPRESSION (17-27 KT)

DD: DEEP DEPRESSION (28-33 KT)

CS: CYCLONIC STORM (34-47 KT)

SCS: SEVERE CYCLONIC STORM (48-63KT)

VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)

ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)

SuCS: SUPER CYCLONIC STORM ( $\geq$  120 KT)

● LESS THAN 34 KT

○ 34-47 KT

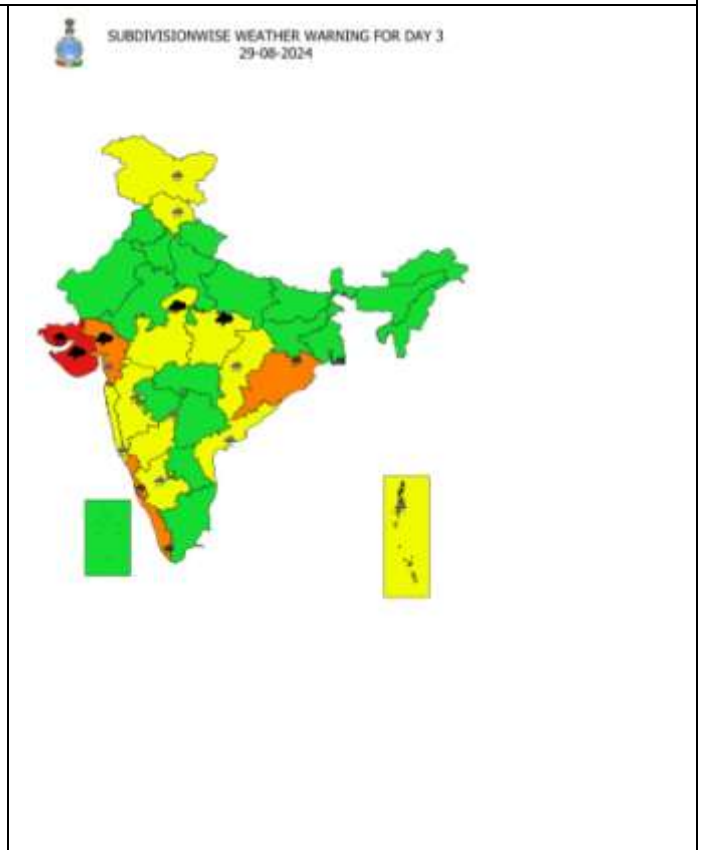
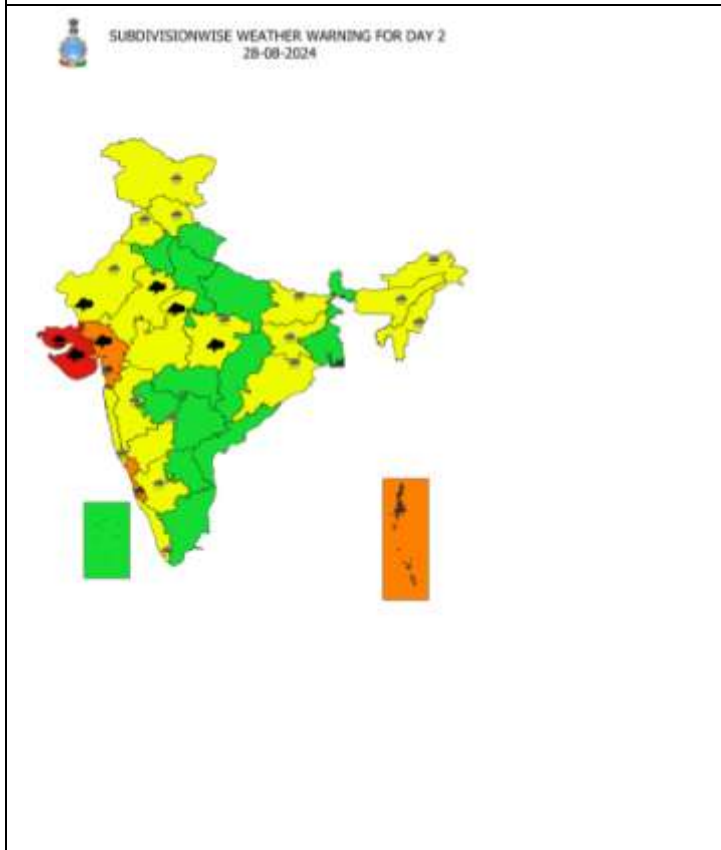
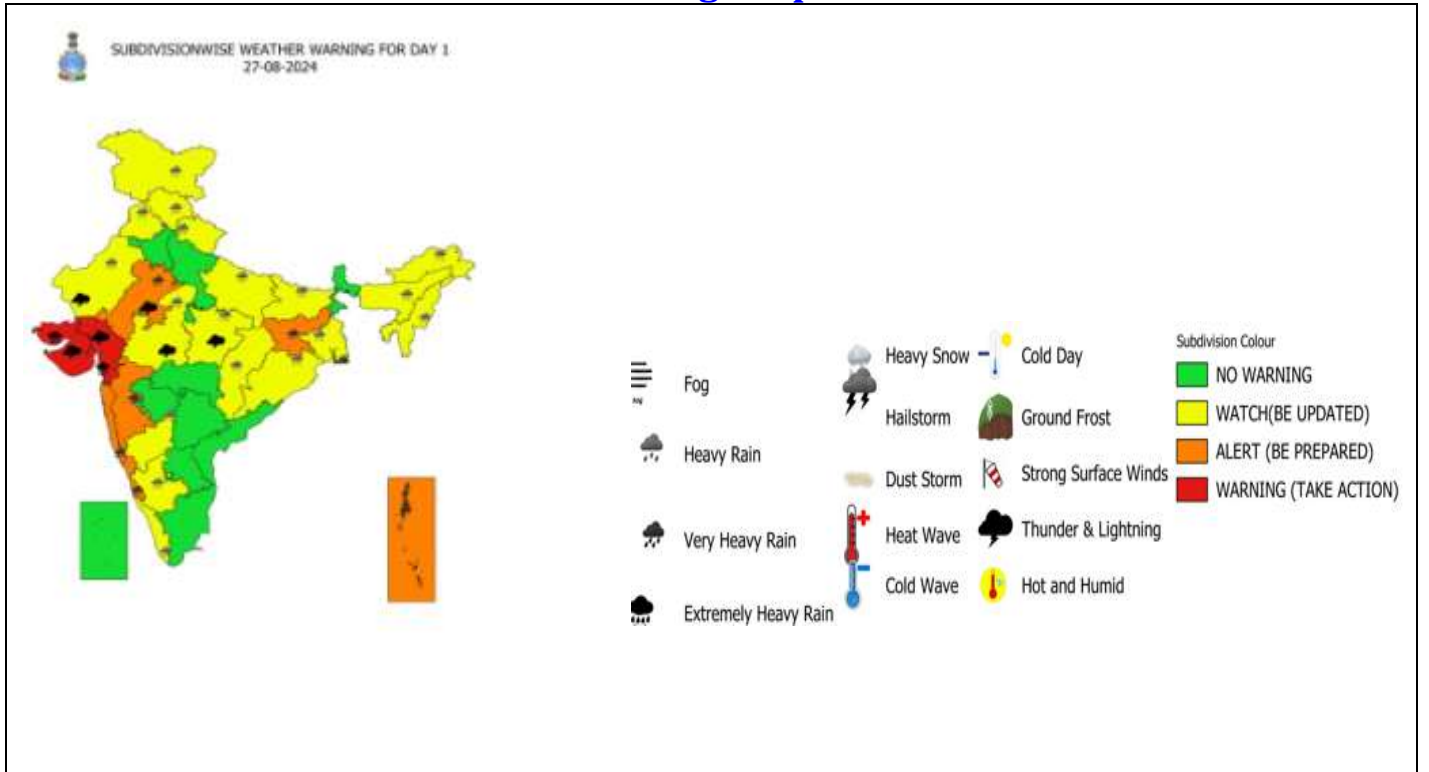
○  $\geq$  48 KT

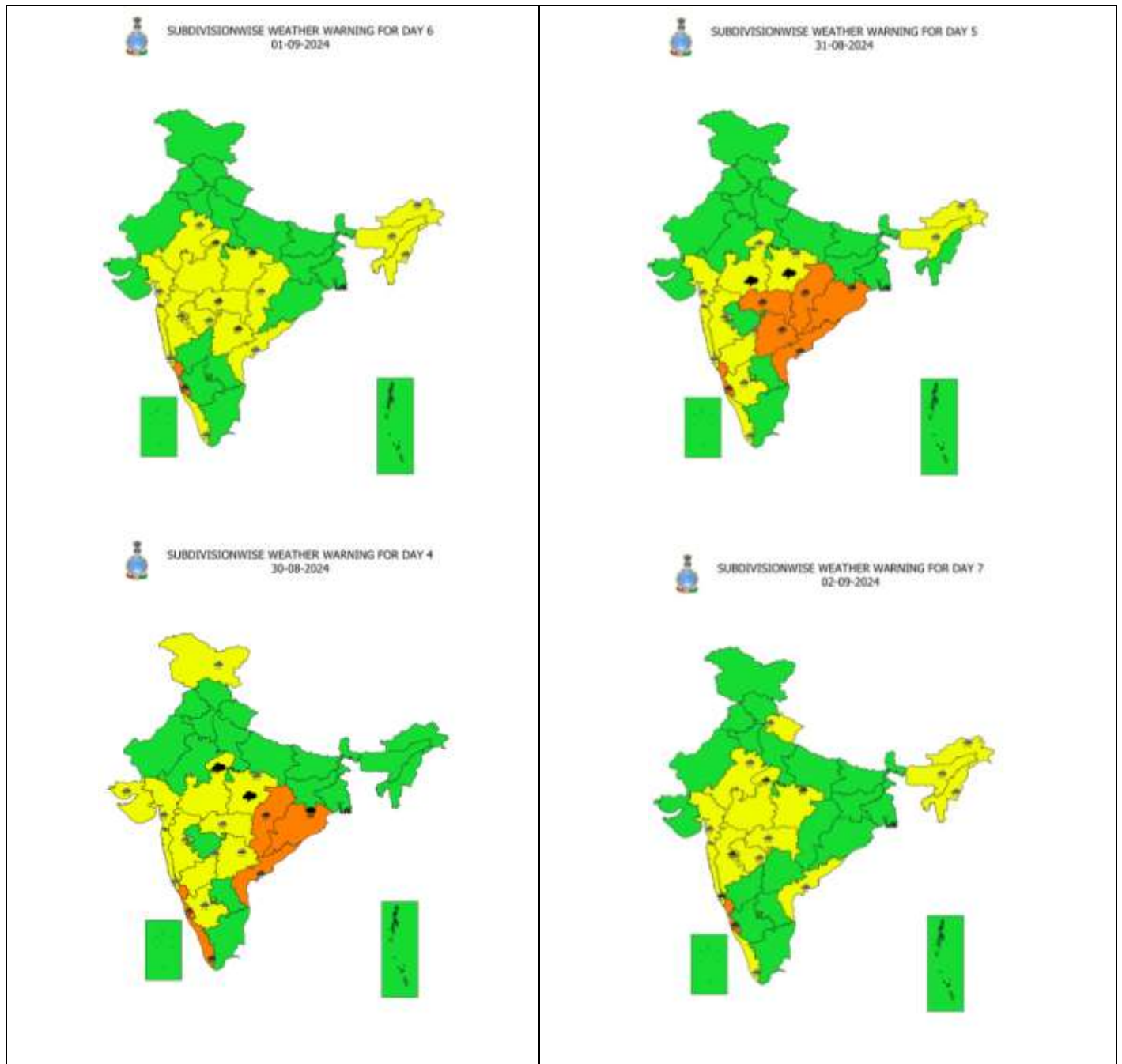
— OBSERVED TRACK

— FORECAST TRACK

▲ CONE OF UNCERTAINTY

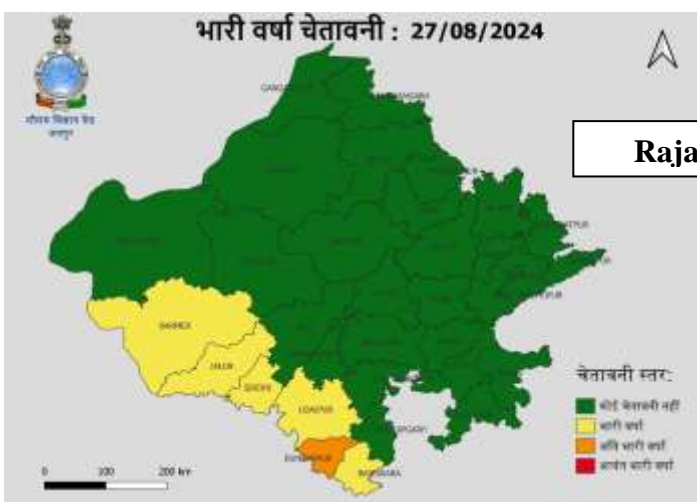
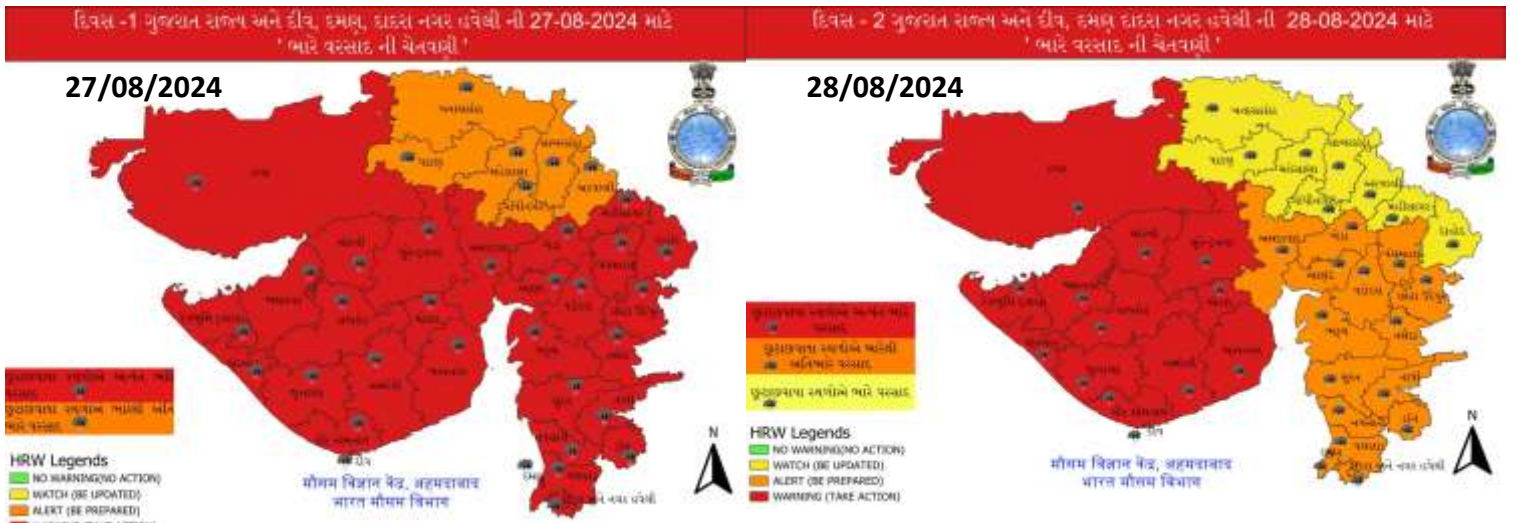
# Weather Warning Graphics





- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

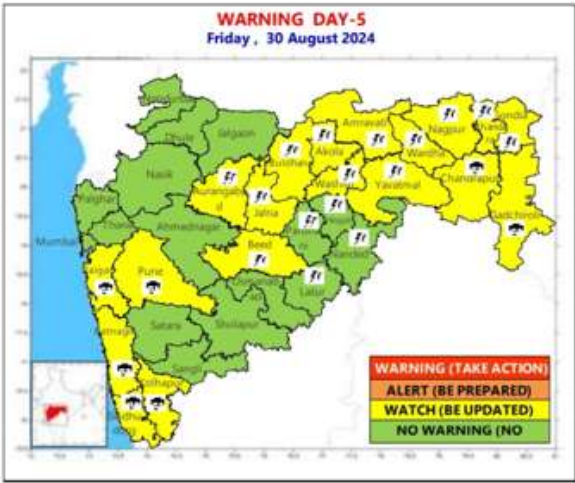
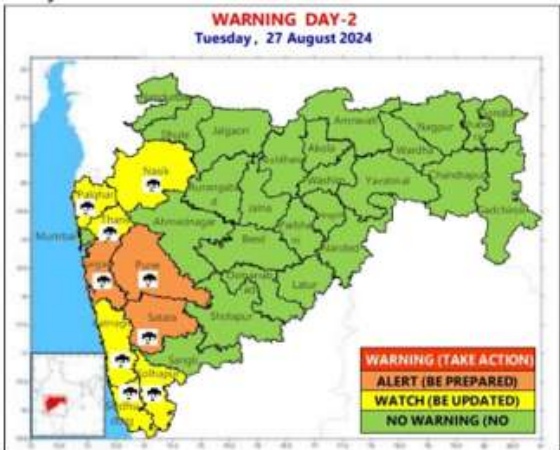
# District wise Warning Graphics Gujarat



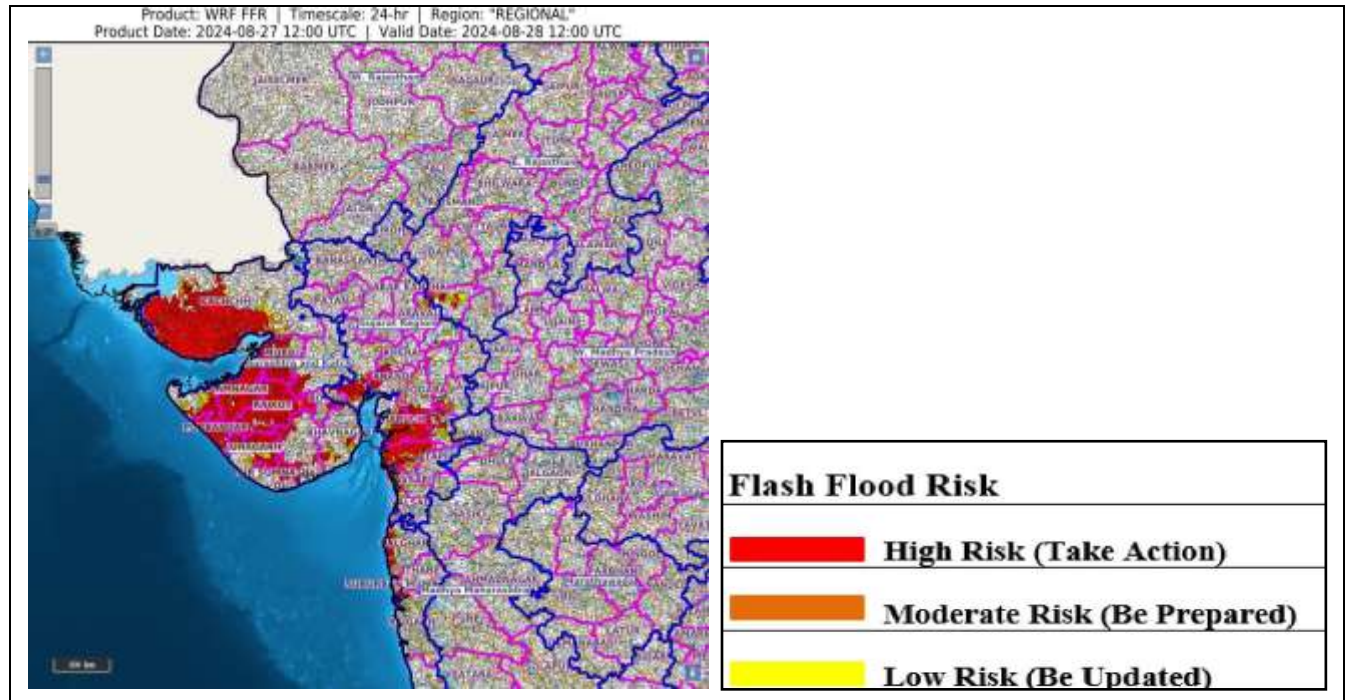
**Rajasthan**



Maharashtra



## Flood Guidance



### **24 hours Outlook for the Flash Flood Risk (FFR) till 1730 IST of 28-08-2024 :**

Moderate to High flash flood risk likely over few watersheds & neighbourhoods of following Met Sub-divisions during next 24 hours.

**Southern parts of East Rajasthan** -Banswara, Dungarpur, and Udaipur districts.

**Gujarat Region** – Ahmadabad, Anand, Bharuch, Khera, Mahisagar, Narmada, Vadodara, Sabar Kantha, Aravalli, Navsari, Panchmahal, Surat, Tapi, and Valsad districts.

**Saurashtra & Kutch** - Amreli, Bhavnagar, Botad, Devbhoomi Dwarka, Gir Somnath, Jamnagar, Junagarh, Porbandar, Rajkot, Surendranagar, Morbi and Kachchh districts.

Surface runoff/ Inundation may occur at some fully saturated soils & low-lying areas over Area of Concern (AoC) as shown in map due to expected rainfall occurrence in next 24 hours.

**Fishermen Warning Graphics**



	Squally WX with wind speed 35-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind with speed 45-55 kmph gusting to 65 kmph
	Squally wind with speed 55-65 kmph gusting to 75 kmph

**Fishermen are advised not to venture into the marked areas.**

**Significant Rainfall recorded during past 24 hours till 0830 hours IST of today 27.08.2024 (in cm):**

- ❖ **Saurashtra & Kutch:** Tankara (Morbi) 36, Wankaner (Morbi) 34, Rajkot (Rajkot) 32, Kalavad (Jamnagar) 26, Mandvi(k) (Kutch) 25, Khambhalia (Devbhoomi Dwarka) 25, Lodhika (Rajkot) 23, Chotila (Surendranagar) 22, Morbi (Morbi) 22, Nakhatrana (Kutch) 22, Thangadh (Surendranagar) 21, Lalpur (Jamnagar) 21, Kotdasangani (Rajkot) 17, Chuda (Surendranagar) 16, Jodia (Jamnagar) 16, Dhrol (Jamnagar) 14, Sayla (Surendranagar) 14, Lakhtar (Surendranagar) 13, Barvala (Botad) 13, Jamnagar (Jamnagar) 12, Gadhda (Botad) 12, Dasada (Surendranagar) 12, Vadia (Amreli) 12, Paddhari (Rajkot) 12, Gondal (Rajkot) 12, Botad (Botad) 12, Visavadar (Junagadh) 11, Ranpur (Botad) 11, Muli (Surendranagar) 11, Wadhvan (Surendranagar) 11, Jasdan (Rajkot) 11, Dwarka (Devbhoomi Dwarka) 11, Naliya (Kutch) 11, Babra (Amreli) 11, Kalyanpur (Devbhoomi Dwarka) 10, Jamnagar (Jamnagar) 10, Okha (Devbhoomi Dwarka) 10, Surendranagar (Surendranagar) 10, Keshod (Junagadh) 10
- ❖ **Gujarat Region:** Morva Hadaf (Panchmahal) 34, Tarapur (Anand) 31, Nadiad (Kheda) 29, Khambhat (Anand) 29, Borsad (Anand) 28, Padra (Vadodara) 28, Vadodara (Vadodara) 28, Godhra (Panchmahal) 27, Sojitra (Anand) 27, Wanakbori (Mahisagar) 26, Anand (Anand) 24, Mahemdavad (Kheda) 23, Vaso (Kheda) 22, Balasinor (Mahisagar) 21, Mahudha (Kheda) 21, Dholka (Ahmedabad) 20, Bilodara\_aws (Kheda) 19, Matar (Kheda) 19, Kheda (Kheda) 19, Meghraj (Aravalli) 19, Halol (Panchmahal) 18, Ghoghamba (Panchmahal) 18, Jotana (Mehsana) 18, Galteshwar (Kheda) 17, Shahera (Panchmahal) 17, Santrampur (Mahisagar) 17, Jambughoda (Panchmahal) 17, Limkheda (Dahod) 17, Dhandhuka (Ahmedabad) 17, Arnej\_aws (Ahmedabad) 16, Siddhpur (Patan) 15, Fatepura (Dahod) 15, Kadi (Mehsana) 15, Singvad (Dahod) 14, Dhandhuka (Ahmedabad) 14, Mansa (Gandhinagar) 14, Abad City (Ahmedabad) 14, Kathalal (Kheda) 14, Chhota Udepur (Chhota Udepur) 14, Khanpur (Mahisagar) 14, Anklav (Anand) 14, Umreth (Anand) 13, Visnagar (Mehsana) 13, Modasa (Aravalli) 13, Dascroi (Ahmedabad) 13, Mc Ahmedabad (Ahmedabad) 13, Mandal (Ahmedabad) 13, Waghai (Dangs) 13, Bavla (Ahmedabad) 12, Virpur (Mahisagar) 12, Savli (Vadodara) 12, Dholera (Ahmedabad) 12, Becharaji (Mehsana) 12, Viramgam (Ahmedabad) 11, Jhalod (Dahod) 11, Dang (Dangs) 11, Vadodara\_aws (Vadodara) 11, Desar (Vadodara) 11, Harij (Patan) 11, Waghodia (Vadodara) 11, Petlad (Anand) 11, Bayad (Aravalli) 11, Jetpur Pavi (Chhota Udepur) 11, Vadnagar (Mehsana) 11, Godra\_aws (Panchmahal) 11, Bodeli (Chhota Udepur) 11, Vijapur (Mehsana) 10, Subir (Dangs) 10, Dhanpur (Dahod) 10, Gandhinagar (Gandhinagar) 10, Mahesana (Mehsana) 10, Kalol(g) (Gandhinagar) 10, Sanjeli (Dahod) 10, Dahegam (Gandhinagar) 10, Detroj (Ahmedabad) 10, Prantij (Sabarkantha) 10
- ❖ **Chhattisgarh:** Kusmi (Balrampur) 25, Wandrafnagar (Balrampur) 15, Raghunath Nagar (Balrampur) 9, Manora (Jashpur) 9, Sanna (Jashpur) 7
- ❖ **East Rajasthan:** Bagidora(Banswara) 20, Sallopat(Banswara) 17, Shergarh(Banswara) 17, Dhambola (Dungarpur) 14, Veja(Dungarpur) 13, Arthuna (Banswara) 11, Sajjangarh (Banswara) 10, Loharia (Banswara) 9, Khushalgarh (Banswara) 9, Chikali (Dungarpur) 9, Garhi (Banswara) 8, Kanva (Dungarpur) 7, Galiakot (Dungarpur) 7, Sanganer Tehsil(Jaipur) 7
- ❖ **East Madhya Pradesh:** Kusmi (Sidhi) 15, Sidhi (gopadbanas) (Sidhi) 14, Churhat (Sidhi) 14, Nagode (Satna) 11, Beohari (Shahdol) 11, Bahri (Sidhi) 11, Rampur (Sidhi) 10, Majhauri (Sidhi) 9, Devser (Singrauli) 9, Sihawal (Sidhi) 9, Orchha (Niwari) 8,

- Bilhari (Katni) 8, Naigarhi (Rewa) 7, Semariya (Rewa) 7, Gudh (Rewa) 7, Lavkushnagar (Chhatarpur) 7
- ❖ **Madhya Maharashtra:** Gaganbawada (Kolhapur) 13, Mahabaleshwar- Imd Obsy (Satara) 13, Surgana (Nashik) 12, Lonavala\_agri (Pune) 11, Trimbakshwar (Nashik) 11, Shahuwadi (Kolhapur) 10, Ajra (Kolhapur) 9, Chandgad (Kolhapur) 9, Radhanagari (Kolhapur) 9, Velhe (Pune) 9, Peth (Nashik) 8, Patan (Satara) 7, Igatpuri (Nashik) 7, Harsul (Nashik) 7
  - ❖ **Konkan & Goa:** Jawhar (Palghar) 12, Awalegaon - Arg (Sindhudurg) 10, Matheran (Raigad) 8, Pawarwadi (Ratnagiri) 8, Lanja (Ratnagiri) 7, Mandangad (Ratnagiri) 7, Mokheda (Palghar) 7, Vikramgad (Palghar) 7, Rajapur (Ratnagiri) 7
  - ❖ **West Madhya Pradesh:** Kathiwada (Alirajpur) 10, Bhabhra (Alirajpur) 9, Meghnagar (Jhabua) 7, Udaigarh (Alirajpur) 7, Thandla (Jhabua) 7
  - ❖ **Bihar:** Khaira (Jamui) 7, Silao (Nalanda) 7, Sono (Jamui) 7
  - ❖ **Jharkhand:** Rania (Khunti) 14, Kharsema (Seraikela-Kharsawan) 13, Maithon (Dhanbad) 12, Dumri (Giridih) 12, Bagodari (Giridih) 11, Panchet Dist Dhanbad) 9, Nandadih (Giridih) 9, Panchet (Dhanbad) 9, Nawadih (Bokaro) 9, Dumri (Giridih) 9, Hunterganj (Chatra) 8, Chandil (Seraikela-Kharsawan) 8, Markachou (Koderma) 8, Gobindpur (Dhanbad) , Madhupur (Deoghar) 8, Chakulia (East Singbhum) 8, Torpa (Khunti) 7, Giridih Bengbad (Giridih) 7, Giridih (Giridih) 7, Jamtara Fmo (Jamtara) 7, Diyakel Khunti (Khunti) 7
  - ❖ **Orissa:** Jagatsinghpur ( Jagatsinghpur) 11, Cuttack ( Cuttack) 9, Bhuban ( Dhenkanal) 9, Kantapada ( Cuttack) 9, Athgarh ( Cuttack) 7, Mundali ( Cuttack) 7, Banki ( Cuttack) 7
  - ❖ **Chhattisgarh:** Kusmi (Balrampur) 25, Wandrafnagar (Balrampur) 15, Raghunath Nagar (Balrampur) 9, Manora (Jashpur) 9, Sanna (Jashpur) 7
  - ❖ **Gangetic West Bengal:** Bankura (Bankura) 13, Luchipur (Paschim Bardhaman) 11, Diamond Harbour (South 24 Parganas) 11, Bankura (Bankura) 10, Asansol (Paschim Bardhaman) 9, Asansol (Paschim Bardhaman) 9, Jhargram (pto) (Jhargram) 8, Burnpur (Paschim Bardhaman) 8, Kalaikunda (West Midnapore) 7, Midnapore (West Midnapore) 7