



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

NATIONAL BULLETIN NO. 15(LAND/02/2024)

TIME OF ISSUE:0200HOURS IST

DATED:28.08.2024

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 Saurashtra & Kachchh and adjoining north Gujarat moved westwards with a speed of 7kmph during past 6 hours and lay centered at 2330 hours IST of yesterday, the 27th August over the same region near latitude 23.7°N and longitude 70.6 °E, about 10 km north-northwest of Rapar (Gujarat), 70 km north-northeast of New Kandla (Gujarat), 90 km east-northeast of Bhuj (Gujarat) and 185 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 northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh

The low pressure area over southeast Uttar Pradesh and adjoining northeast Madhya Pradesh moved west-northwestwards and lay over northern parts of central Madhya Pradesh & adjoining south Uttar Pradesh at 2330 hours IST of yesterday, the 27th August 2024. It is likely to continue to move west-northwestwards across northern parts of 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 27th & 28th August; heavy to extremely heavy at isolated places on 29th August and heavy rainfall at isolated places on 30th August.

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

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

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

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

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

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

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

Bihar: Light to moderate rainfall at many places with heavy rainfall at isolated places is likely during 27th to 28th 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 27th 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 27th-29th 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 27th-30th August.
- Strong surface wind speed reaching 40-50 kmph gusting to 60 kmph is very likely to prevail over South Rajasthan on 27th August.
- Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail along and off north Maharashtra coasts on 27-29th 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 30th 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 30th 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 Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra

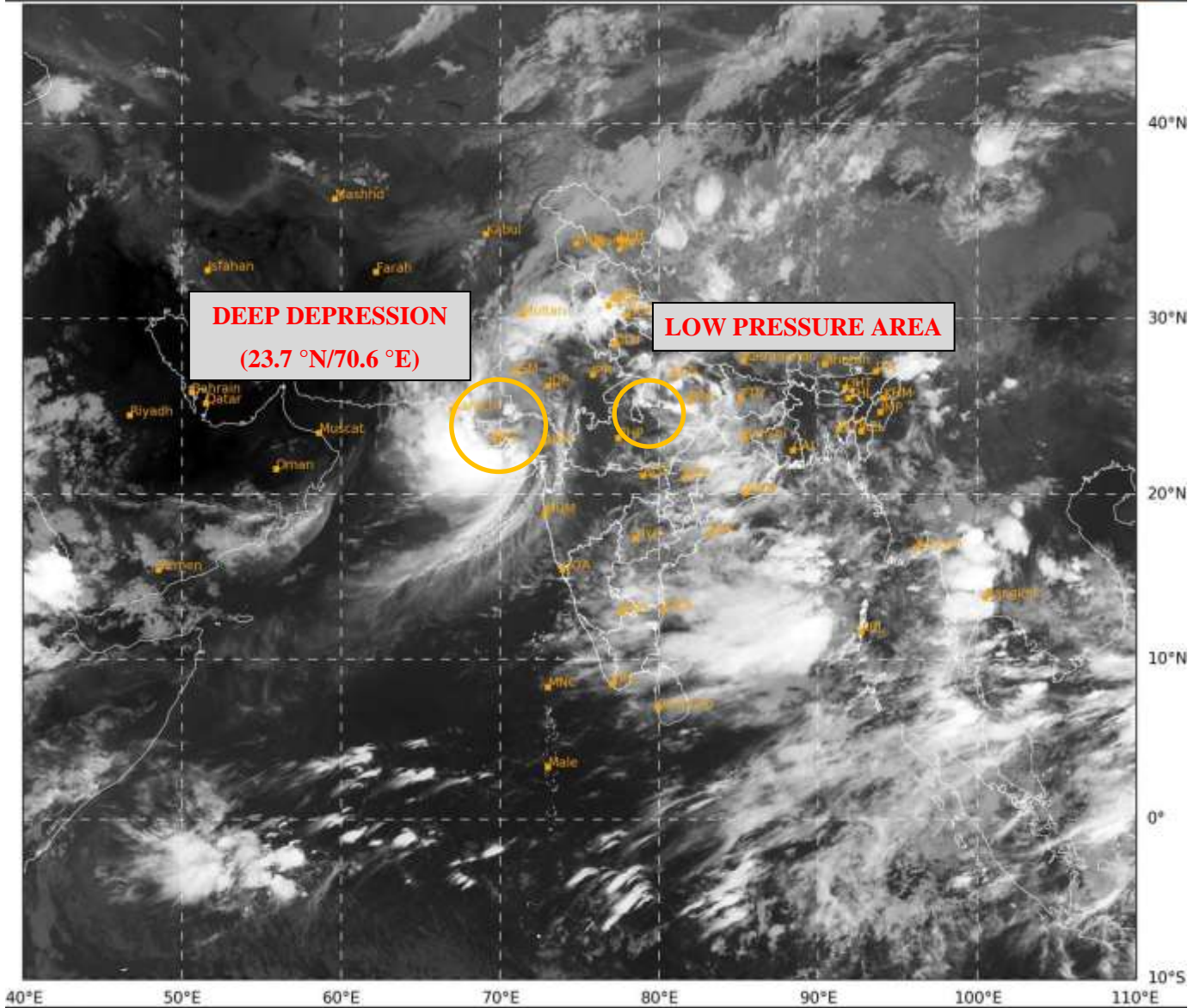
- Make provision for draining out excess water from crop fields to avoid water stagnation in Madhya Pradesh, South Rajasthan, Gujarat State and North Maharashtra.
- Provide mechanical support to horticultural crops and staking to vegetables.

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

Next bulletin will be issued at 0830 hours IST of today, the 28th August, 2024.

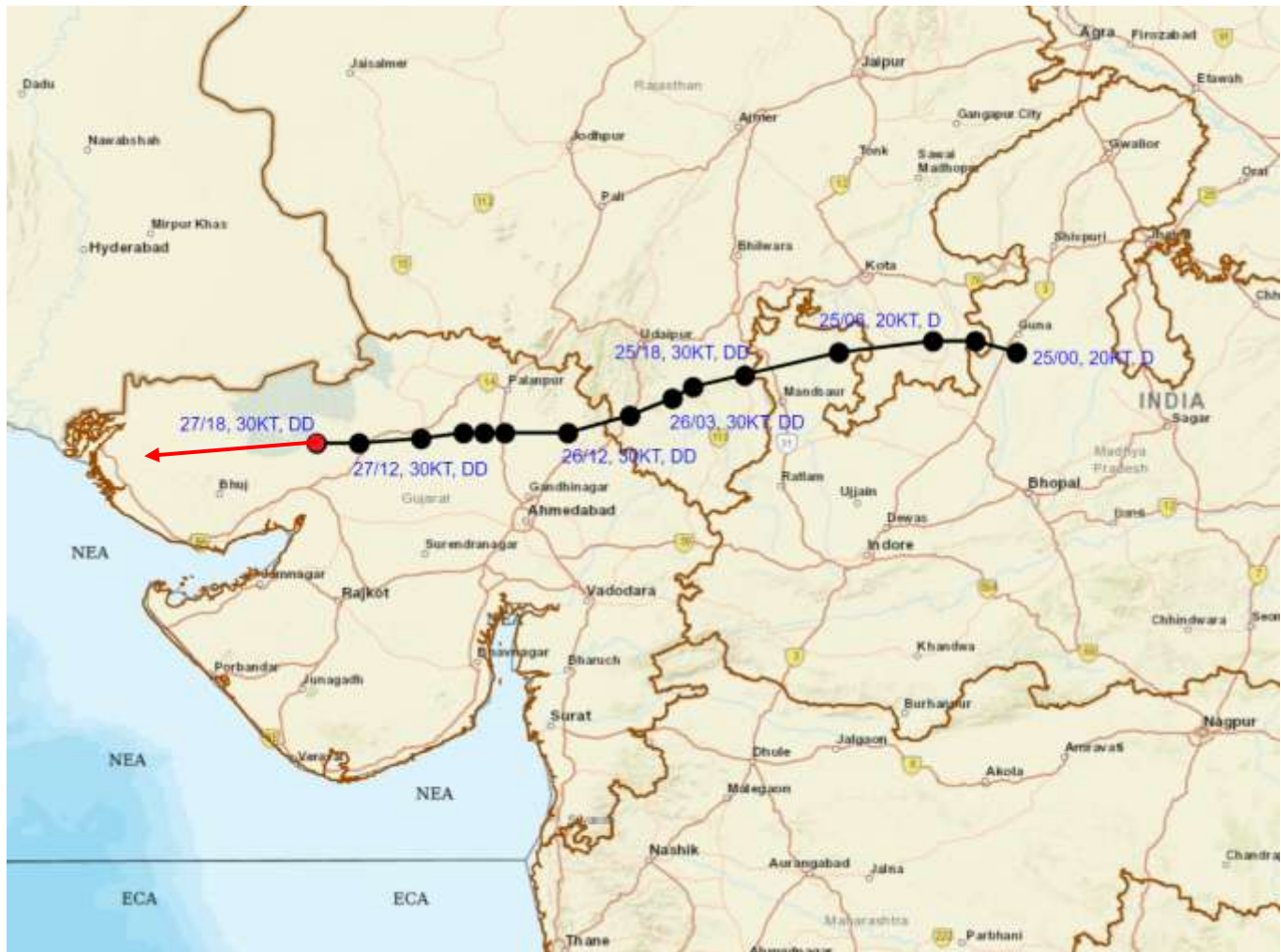
(Akhil Srivastava)
Scientist D, Cyclone Warning, New Delhi

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





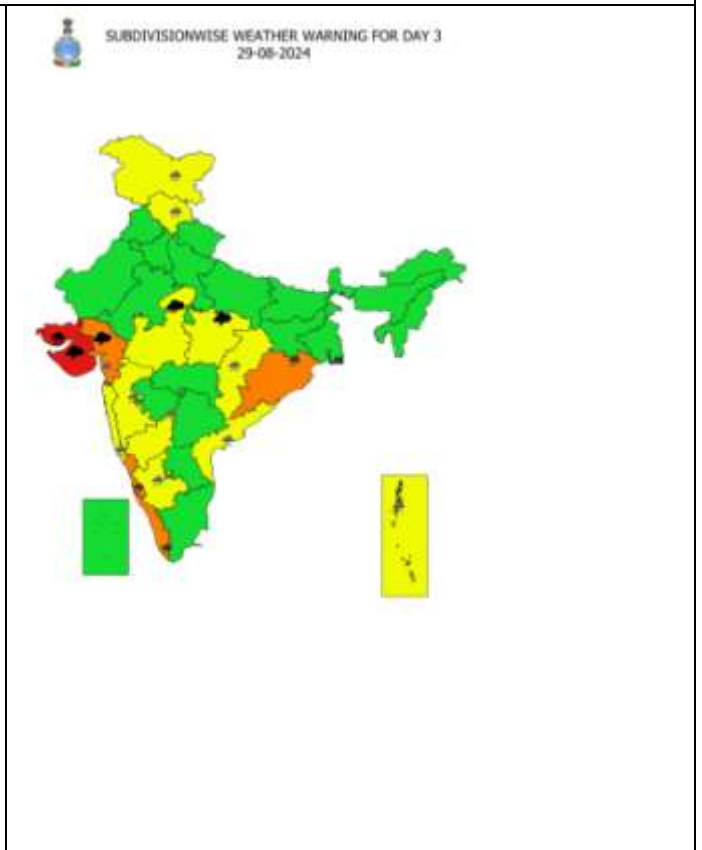
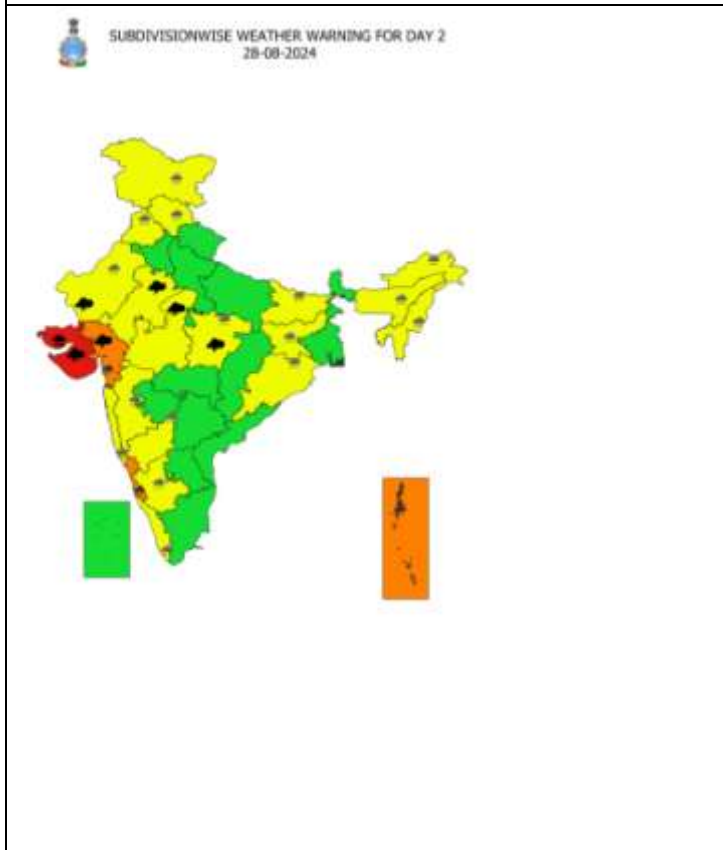
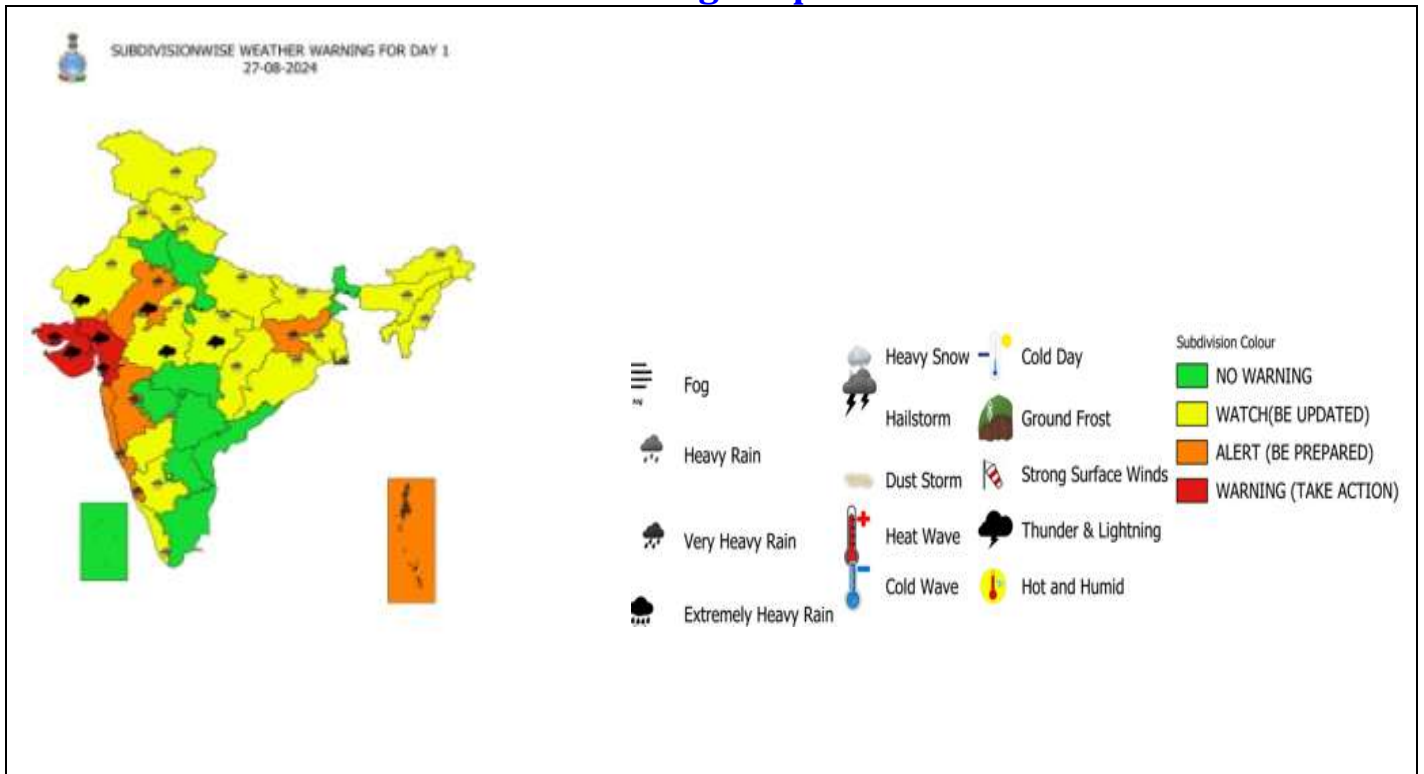
OBSERVED AND FORECAST TRACK OF DEEP DEPRESSION OVER SAURASHTRA & KACHCHH AND ADJOINING NORTH GUJARAT BASED ON 1800 UTC (2330 IST) OF 27TH AUGUST, 2024.

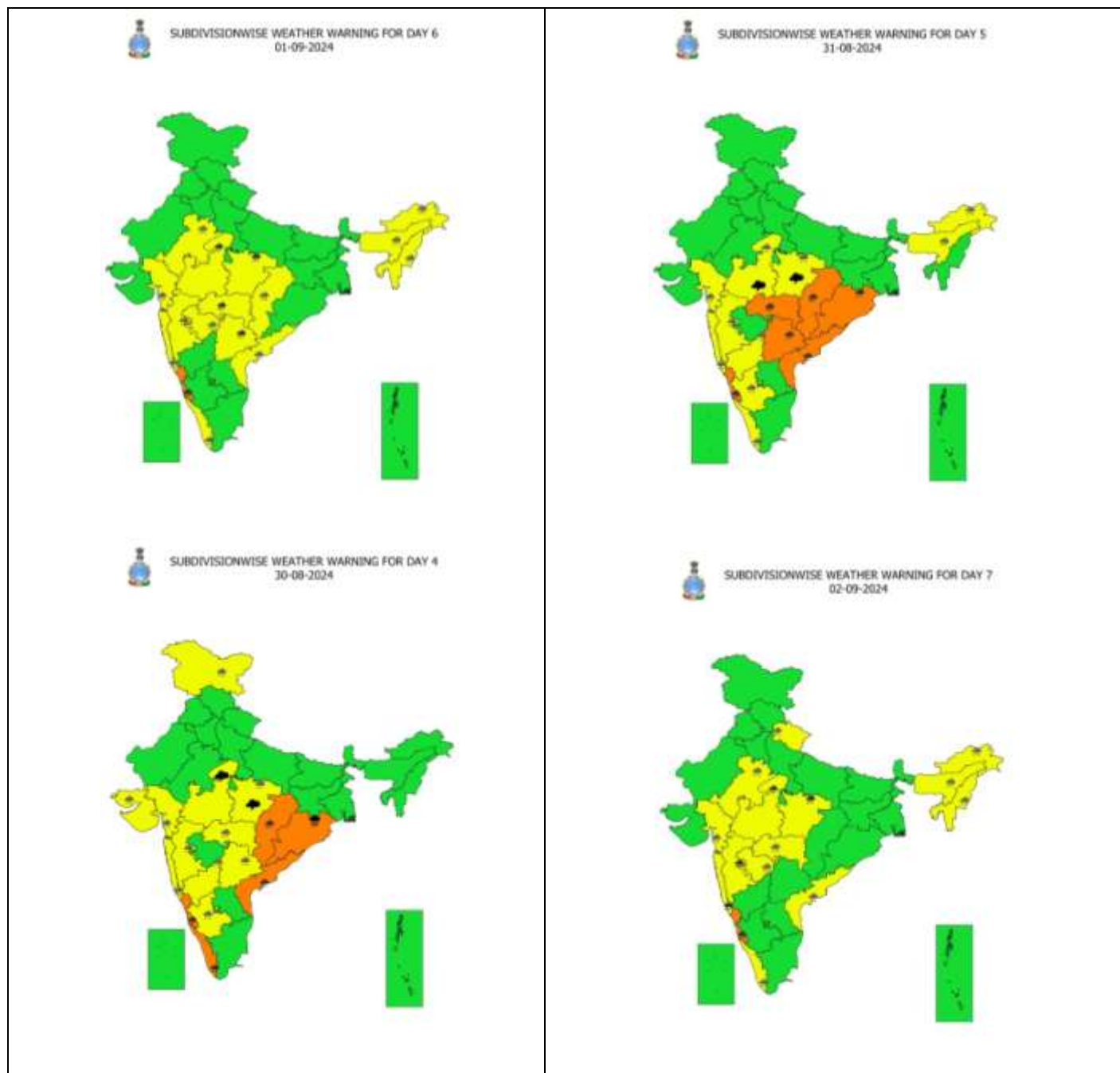


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥20 KT)

- LESS THAN 34 KT
- 34-47 KT
- ≥ 48 KT
- OBSERVED TRACK
- FORECAST TRACK
- CONE OF UNCERTAINTY

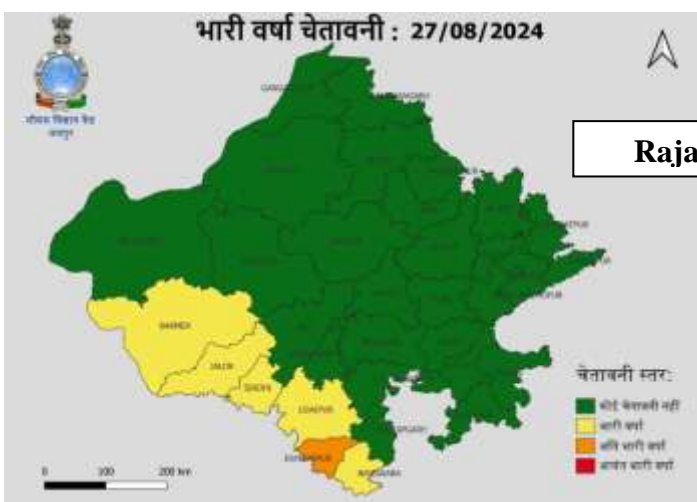
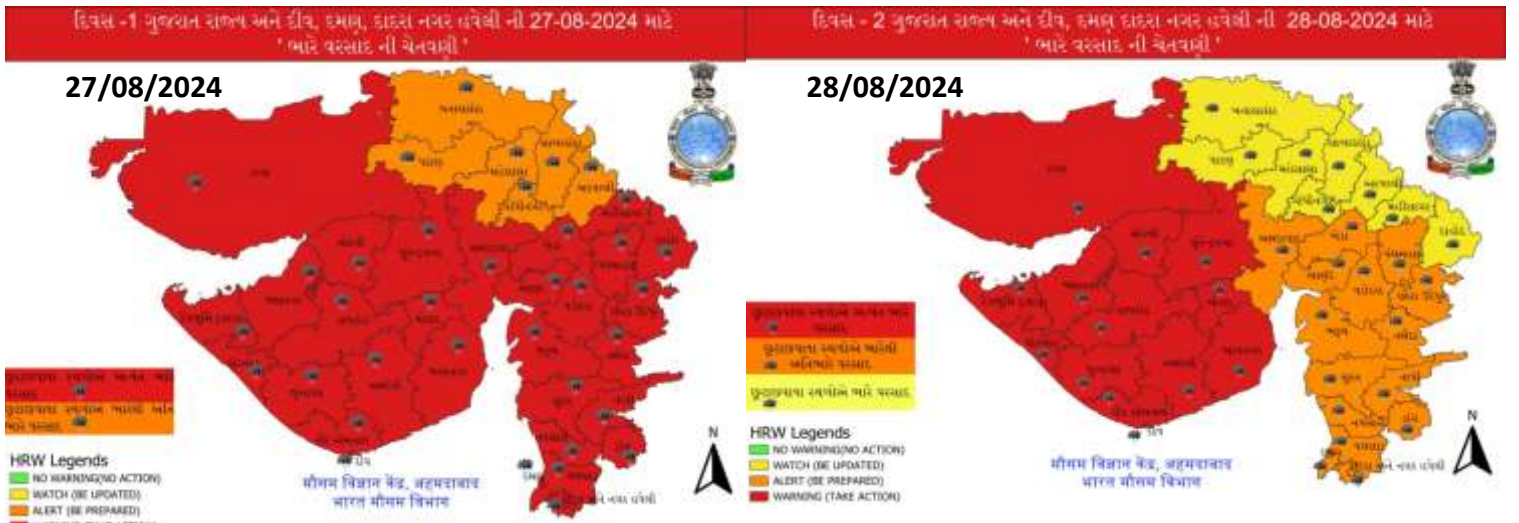
Weather Warning Graphics





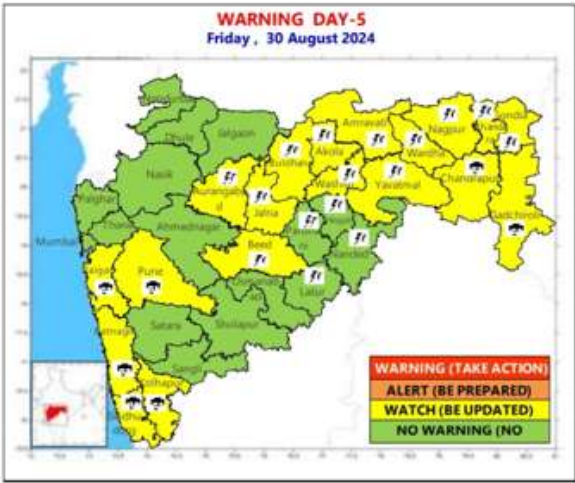
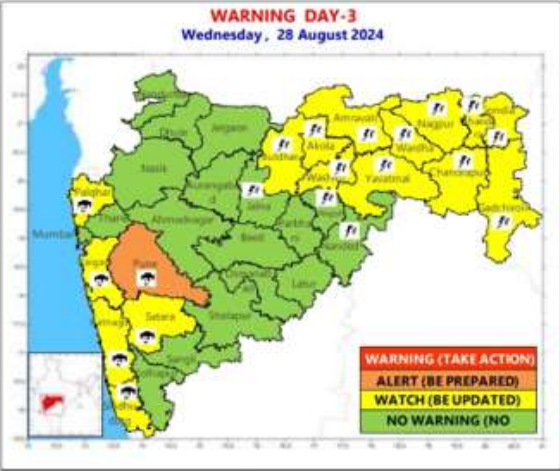
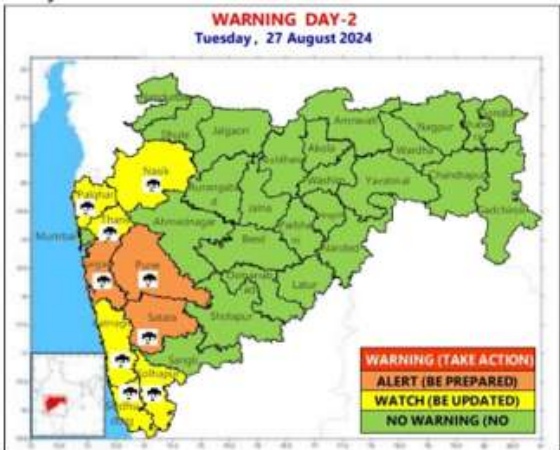
- Action may be taken based on **ORANGE AND RED** COLOUR warnings.
- Vulnerable regions likely urban and hilly areas action may be initiated for heavy rainfall warning.
- As the lead period increases forecast accuracy decreases.

District wise Warning Graphics Gujarat

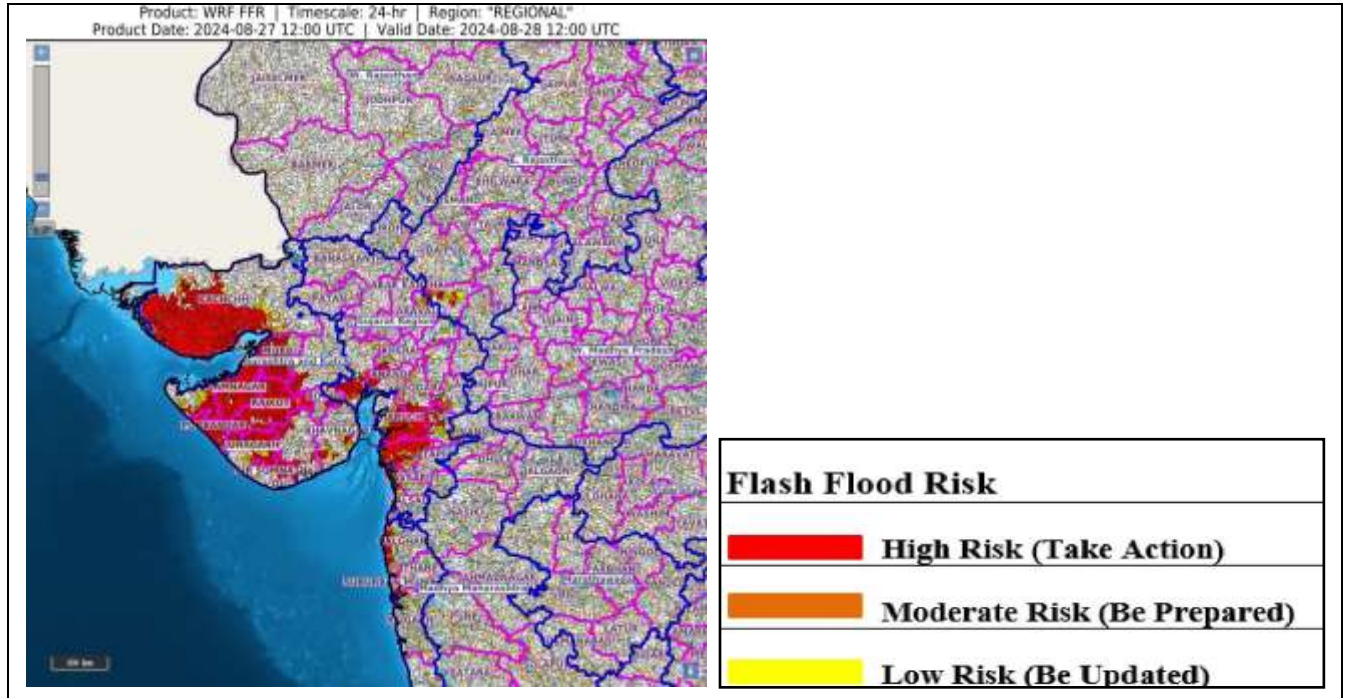


Rajasthan

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, SabarKantha, Aravalli, Navsari, Panchmahal, Surat, Tapi, and Valsad districts.

Saurashtra & Kutch -Amreli, Bhavnagar, Botad, DevbhoomiDwarka, GirSomnath, 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 27.08.2024 (in cm):

- ❖ **Saurashtra& Kutch:** Tankara(Morbi) 36, Wankaner(Morbi) 34, Rajkot (Rajkot) 32, Kalavad(Jamnagar) 26, Mandvi(k) (Kutch) 25, Khambhalia(DevbhoomiDwarka) 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(DevbhoomiDwarka) 11, Naliya(Kutch) 11, Babra(Amreli) 11, Kalyanpur(DevbhoomiDwarka) 10, Jamnagar (Jamnagar) 10, Okha(DevbhoomiDwarka) 10, Surendranagar(Surendranagar) 10, Keshod(Junagadh) 10
- ❖ **Gujarat Region:** MorvaHadaf(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, ChhotaUdepur(ChhotaUdepur) 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, JetpurPavi(ChhotaUdepur) 11, Vadnagar(Mehsana) 11, Godra_aws(Panchmahal) 11, Bodeli(ChhotaUdepur) 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-ImdObsy(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, PanchetDistDhanbad) 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, GiridihBengbad(Giridih) 7, Giridih (Giridih) 7, JamtaraFmo (Jamtara) 7, DiyakelKhunti(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 (PaschimBardhaman) 11, Diamond Harbour (South 24 Parganas) 11, Bankura (Bankura) 10, Asansol (PaschimBardhaman) 9, Asansol (PaschimBardhaman) 9, Jhargram (pto) (Jhargram) 8, Burnpur (PaschimBardhaman) 8, Kalaikunda (West Midnapore) 7, Midnapore (West Midnapore) 7