

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 23 Jun 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Advance of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 22°N/ Long. 60°E, Lat. 22°N/ Long. 65°E, Porbandar, Baroda, Shivpuri, Rewa, Churk, 27.0°N/84°E.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of an off-shore trough, a middle-level cyclonic circulation over Eastcentral Arabian Sea off Maharashtra coast and strong westerly winds along the west coast in lower tropospheric levels:
 - o Fairly widespread/ widespread rainfall with thunderstorm/lightning very likely over Karnataka, Konkan & Goa, Kerala & Mahe and Lakshadweep and scattered to fairly widespread rainfall likely over Madhya Maharashtra, Marathwada, Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal during next 5 days.
 - o Isolated heavy rainfall very likely over Konkan & Goa, Gujarat region, Coastal Karnataka and Kerala & Mahe during next 5 days; ghat areas of Madhya Maharashtra during 23rd-26th; Interior Karnataka on 25th; Coastal Andhra Pradesh on 23rd & 24th June, 2022. Isolated Very heavy rainfall also likely over Konkan & Goa during next 4 days.
- Under the influence of southerly/southwesterly winds from Bay of Bengal to Northeast & adjoining East India:
 - o Widespread rainfall very likely over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 5 days. Isolated heavy rainfall likely over SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 5 days. Isolated very heavy rainfall also likely over Sub-Himalayan West Bengal during 25th-27th June.
 - o Fairly widespread rainfall with thunderstorm/lightning very likely to continue over Bihar, Jharkhand, Odisha, Chhattisgarh, Vidarbha and Gangetic West Bengal during next 5 days. Isolated heavy rainfall likely over Vidarbha on 24th & 25th;

Bihar during 24th-27th and over Odisha during 23rd-25th & 27th and over Chhattisgarh during 23rd-27th June, 2022

- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe, Madhya Maharashtra, Marathwada, Konkan & Goa, Lakshadweep and Coastal Karnataka ; at many places over Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Chhattisgarh, Odisha, Gujarat Region, North Interior Karnataka; at a few places over West Madhya Pradesh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya, Coastal Andhra Pradesh and South Interior Karnataka and at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, East Uttar Pradesh, Rajasthan, East Madhya Pradesh, Vidarbha, Bihar, Saurashtra & Kutch, Tamilnadu, Puducherry & Karaikal, Telangana and Rayalaseema.
- Isolated very heavy rainfall occurred over Konkan & Goa and heavy rainfall over West Rajasthan, West Madhya Pradesh, Manipur, Assam & Meghalaya, Gujarat region, Madhya Maharashtra, Kerala, Coastal Karnataka and Odisha.
- Thunderstorm observed (from 2030 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Rajasthan, Madhya Pradesh, Gujarat Region and Nagaland, Manipur, Mizoram & Tripura.
- Maximum Temperature Departures (as on 22-06-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Arunachal Pradesh and Saurashtra & Kutch and at isolated places over Madhya Maharashtra; above normal (1.6°C to 3.0°C) at many places over Jharkhand; at a few places over West Bengal & Sikkim, Assam & Meghalaya and Kerala & Mahe and at isolated places over Madhya Pradesh. They were markedly below normal (-5.1°C or less) at most places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and at a few places over West Rajasthan; appreciably below normal (-3.1°C to -5.0°C) at isolated places over East Rajasthan. Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh, Telangana, Coastal Karnataka and Tamilnadu, Puducherry & Karaikal; below normal (-1.6°C to -3.0°C) at most places over Punjab; at a few places over North Interior Karnataka and at isolated places over Konkan & Goa and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.6°C was reported at Bhuj (Saurashtra & Kutch).

- Minimum Temperature Departures (as on 23-06-2022): Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over East Uttar Pradesh; at a few places over West Bengal & Sikkim; at isolated places over Assam & Meghalaya. They are markedly below normal (-5.1°C or less) at isolated places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad; appreciably below normal (-3.1°C to -5.0°C) at a few places over West Rajasthan and Himachal Pradesh; at isolated places over Gujarat Region and East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Punjab and Jharkhand; at a few places over Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal; at isolated places over Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, Konkan & Goa and Odisha and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C reported at Khargone (West Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 23 June (Day 1): Heavy to very heavy rainfall at isolated places very likely over Konkan & Goa and heavy rainfall at isolated places over Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat State, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places very likely over East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea and adjoining south east Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka coasts. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over east central Arabian Sea. Fishermen are advised not to venture into these seas.
- 24 June (Day 2): Heavy to very heavy rainfall at isolated places very likely over Konkan & Goa and heavy rainfall at isolated places over Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Coastal Karnataka and Kerala &

Mahe. Thunderstorm accompanied with lightning at isolated places very likely over East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka coasts. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over east central Arabian Sea. Fishermen are advised not to venture into these seas.

- 25 June (Day 3): Heavy to very heavy rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa and heavy rainfall at isolated places over Vidarbha, Chhattisgarh, Bihar, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Madhya Maharashtra, Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places very likely over East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka, Kerala coasts. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over east central Arabian Sea. Fishermen are advised not to venture into these seas.
- 26 June (Day 4): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Konkan & Goa and heavy rainfall at isolated places over Chhattisgarh, Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Gujarat state, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places likely over Uttarakhand, East Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Coastal & North Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off south Gujarat, Maharashtra, Goa, Karnataka, Kerala coasts. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea, 40-50 kmph gusting to 60 kmph likely over east central Arabian Sea. Fishermen are advised not to venture into these seas.

- 27 June (Day 5): Heavy to very heavy rainfall at isolated places very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and heavy rainfall at isolated places over Chhattisgarh, Bihar, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Gujarat Region, Telangana, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places very likely over Uttarakhand, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Coastal Karnataka, Kerala & Mahe and Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off Maharashtra, Goa coasts. Strong winds of 50-60 kmph gusting to 70 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these seas.
- The weather outlook for seven days i.e., 23 Jun to 01 Jul 2022 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Jammu

Weather condition:

Mainly clear weather prevailed during this week with 20.0mm rainfall in one rainy day. The maximum temperature remained above normal by 1 to 3°C except on 17th June on that day temperature decreases by 8 °C and ranged from 29.8 to 42.8 °C and minimum temperature also remained above normal by 1 to 4 °C and ranged from 20.6 to 28.4 °C. The morning and afternoon relative humidity were observed in the range of 37 to 52 % and 13 to 27 %, respectively. The evaporation and sunshine remained in the range of 14.8 to 15.8 mm/day and 5.8 to 8.6 hrs, respectively.

Contingency measure:

- Paddy: Conventional Direct Sowing Nursery raising Main field Main field Postpone irrigation due to chances of rainfall. Weeding in nursery may be done by mechanical methods or use butachlor granules 5G @ 30 kg/ha in puddle soil after emergence of 1st leaf. If required, apply urea to rice seedlings just after water disappears from field. Initiate land preparation of the fields where rice seedlings are to be transplanted and also incorporate the recommended quantity of well rotten FYM/Compost 15 tonnes /ha with the first ploughing for its better mixing. Clean bunds of the main field. Farmers may go for direct sowing of rice

crop due to sufficient moisture in soil and further chances of rainfall, depth of seed should not be more than 3 cm, seed rate should be 8-10 kg, sowing is recommended with DSR seed drill. Sowing is recommended in evening hours and on the same day spray pendimethalin 1kg ai/ha to control weeds. Treat seed with Carbendazim or Bavistin @ 2gm/Kg before sowing.

- Maize: Land preparation Farmers can go for sowing of maize (Vivek-25, Vivek QOM-9 HM-5 and HQPM-1) with seed rate of 20-30 kg/ha after rainfall. Treat the seed with Bavistin @ 3g/Kg of seed before sowing.
- Green Manuring in paddy Vegetative Apply urea @ 2kg /kanal to dhaincha crop after receipt of rainfall. Incorporate dhaincha before flowering stage in the transplanted rice field
- Vegetables: Cucurbits Summer crop (I crop) Rainy season (II crop) Tomato Okra Summer crop (I crop) Rainy season (II crop) fruiting /Harvesting Sowing Flowering/ Fruiting Fruiting Sowing Spray mancozeb @ 0.2%, if symptoms of downy mildew are observed. Remove the virus infected plants and spray imidacloprid @ 0.5ml/lit of water during clear weather. To control fruit borer, spray profenfos + cypermethrin (4:40) @ 1ml/lit of water during clear weather. Prepare land for the sowing of rainy season bitter melon, sponge melon & bitter melon. Install pheromone traps @ 2/kanal along with spray of neem oil @ 3ml/lit during clear weather to control fruit borer during clear weather. Harvest the crop after every 3rd day and avoid application of any insecticide having high residual values. To control yellow vein mosaic in okra, remove virus infected plants. Prepare land for the sowing of rainy season Okra after receipt of rain.
- Floriculture: Rainy annuals Chrysanthemum Nursery raising Cutting Farmers may go for transplanting of rainy seasonal annuals (gaillardia, balsam, cosmos, portulaca, kochia, sunflower, morning glory, gomphrena, celosia etc.) after the receipt of rainfall. Cutting preparation and rooting in sand is recommended after the receipt of rainfall.
- Fodder: Summer fodder Vegetative Postpone irrigation due to chances of rainfall. Milky mushroom Spawn run Disinfect the crop room. Farmers interested in growing milky mushroom should book the spawn of milky mushroom from a reliable agency.
- Horticulture: Mango Citrus Young/Bearing Young/Bearing Postpone irrigation due to chances of rainfall. During clear day, Farmers may spray imidacloprid @ 0.3ml/lit to check leaf hopper & dimethoate @ 1ml/lit to control mango hopper. Spray dimethoate @ 1ml/lit to control citrus psylla, leaf miner & butterfly during clear day.
- Sericulture: Mulberry Cocoon crop Tree plantation Harvested cocoons Prune the

dead wood. Prepare basin around the mulberry trees. Postpone irrigation due to chances of rainfall. Pack the harvested cocoons during in loosely packed muslin cloth bags. The bags should be kept in wire mesh covered racks to avoid rodent attack till sale of the crop.

- Apiculture: Protect colonies from high temperature by shifting to shady areas/ cooler places or cover with wet gunny bags. Provide water source in the apiary. To control mite, dust sulphur on top bars @ 1g/frame /oxalic acid treatment @ 3.5% per litre water.
- Fisheries: Carp farming Fry/ yearlings In case of rainwater harvesting tanks/ponds which mainly depends on rain water and have shortage of other water sources, restrict addition of feed/manuring in such ponds. Farmers who have stocked fish livestock in their ponds are advised to maintain proper water level in their fish ponds.
- Poultry: Maintain Proper ventilation must in poultry house. Spread clean litter material uniformly in the poultry house at thickness of 2-3 inches. Vaccinate chicks against new castle disease and gumbroo disease.
- Live stock: Dairy animals/ Sheep & Goat Provide adequate amount of fresh cool and clean drinking water to the animals at frequent intervals to save animals from heat stroke. Provide water bath 3-4 times in a day. Sprinkle water in sheds to reduce heat stress. Plant shady trees around the sheds Increase protein content in animal ration by 2%. Provide coolers to cross bred cattles during the day time Mineral mixture should be supplemented in diet. Give vaccination against FMD. Livestock needs to be dewormed against strongyles in plain areas of Jammu.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

23-06-2022/(0800 to 0827) GMT
23-06-2022/(1330 to 1357) IST

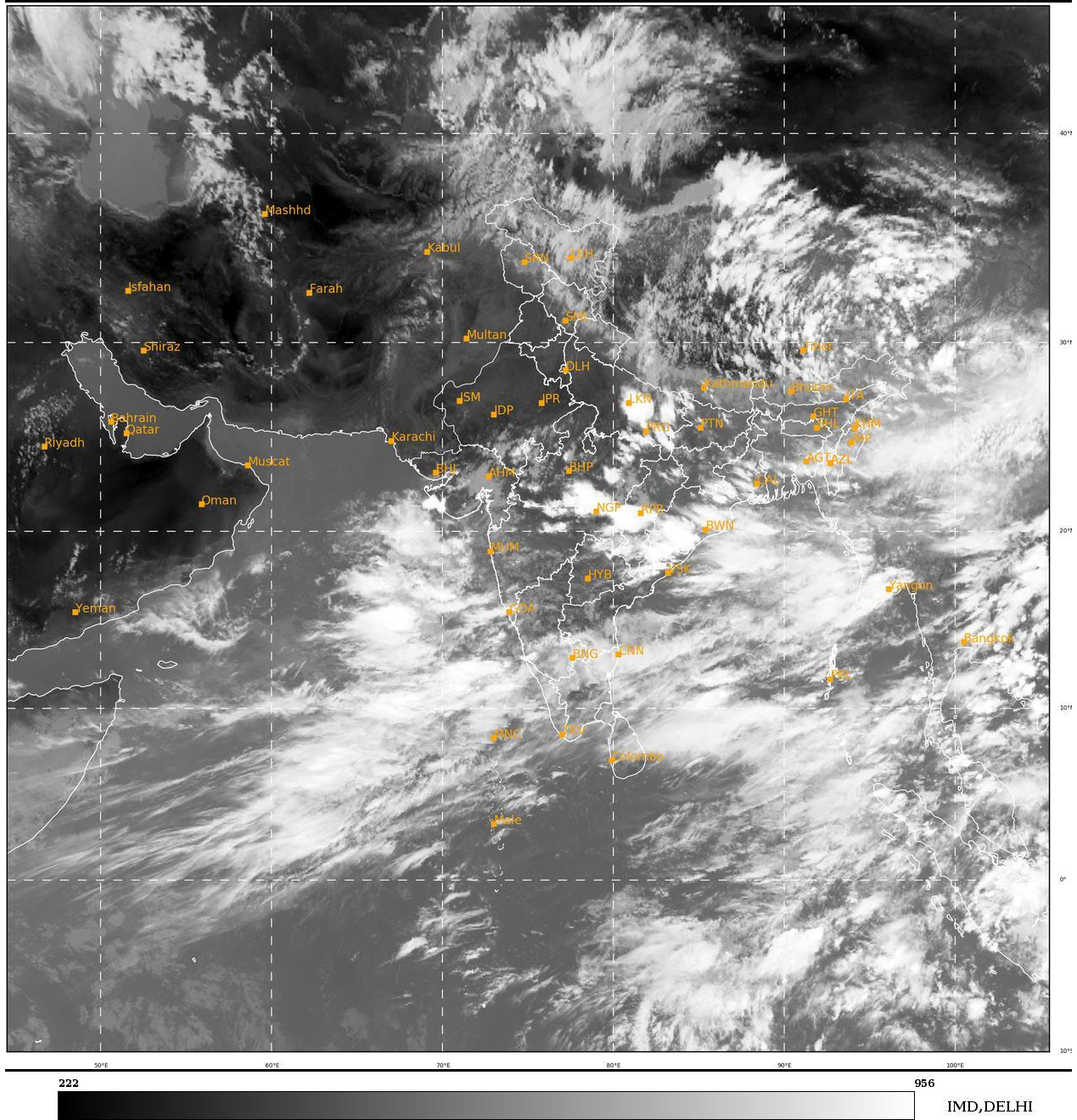


Figure: 1. Latest available satellite picture as on 23 Jun 2022 at 1357 Hrs (IST). (Source: IMD).

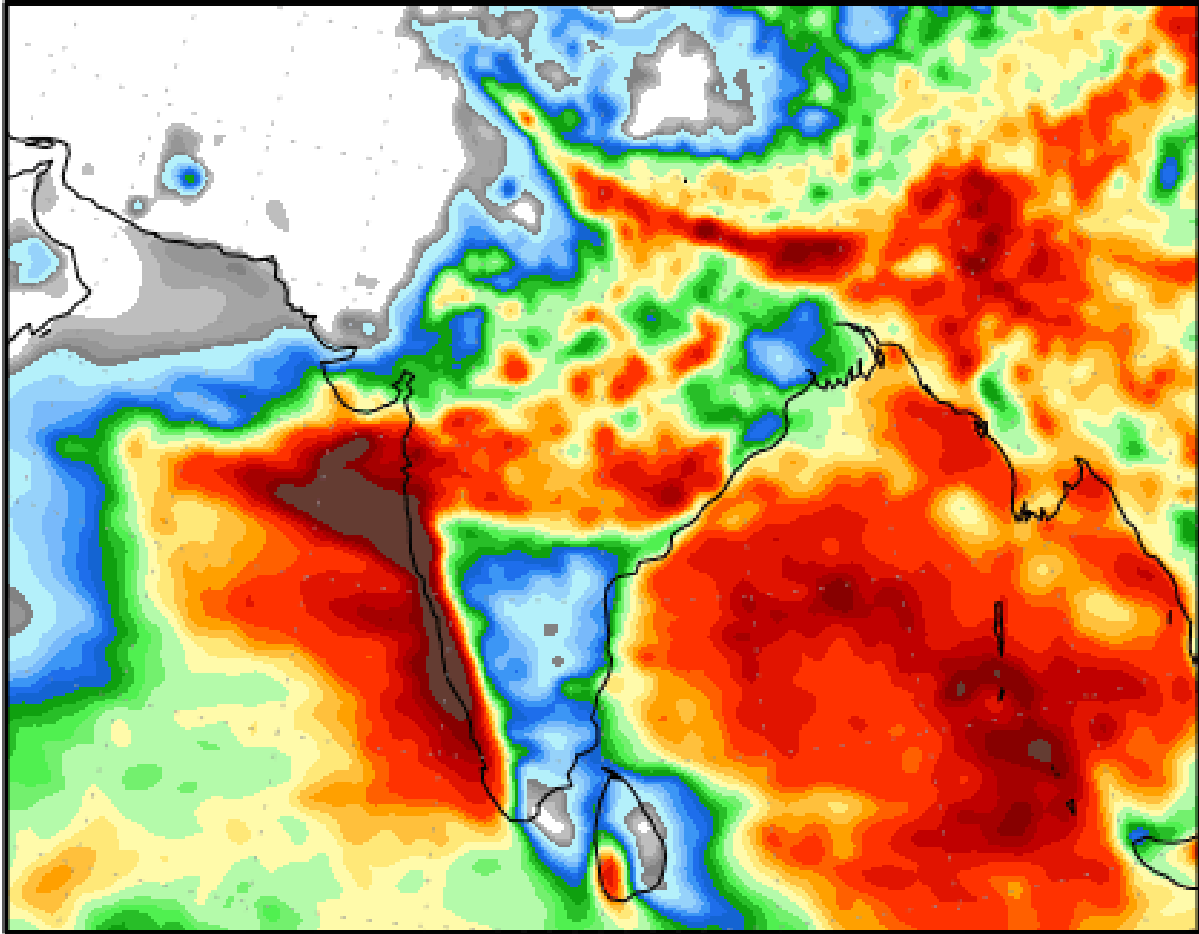


Figure:2. Precipitation forecast for 23 Jun to 01 Jul 2022 (Source: NOAA NCEP).

Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.