



**REGIONAL SPECIALISED METEOROLOGICAL CENTRE-TROPICAL CYCLONES, NEW DELHI  
TROPICAL WEATHER OUTLOOK**

**DEMS-RSMC SPECIAL TROPICAL CYCLONES NEW DELHI DATED 02.03.2022**

**TROPICAL WEATHER OUTLOOK FOR NORTH INDIAN OCEAN (THE BAY OF BENGAL AND ARABIAN SEA) VALID FOR NEXT 120 HOURS ISSUED AT 0600 UTC OF 02.03.2022 BASED ON 0300 UTC OF 02.03.2022.**

**BAY OF BENGAL:**

YESTERDAY'S LOW PRESSURE AREA OVER SOUTHEAST BAY OF BENGAL (BOB) AND ADJOINING EQUATORIAL INDIAN OCEAN (EIO) LAY OVER CENTRAL PARTS OF SOUTH BOB AND ADJOINING EIO AT 0300 UTC OF TODAY, THE 2<sup>ND</sup> MARCH, 2022 WITH VERTICAL EXTENSION UPTO 5.8 KM ABOVE MEAN SEA LEVEL.

IT IS LIKELY TO BECOME A WELL-MARKED LOW PRESSURE AREA DURING NEXT 24 HOURS AND CONCENTRATE INTO A DEPRESSION DURING SUBSEQUENT 24 HOURS. IT IS VERY LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS SRI LANKA COAST DURING NEXT 24 HOURS AND TOWARDS TAMIL NADU COAST DURING SUBSEQUENT 24 HOURS.

SCATTERED TO BROKEN LOW AND MEDIUM CLOUDS WITH EMBEDDED INTENSE TO VERY INTENSE CONVECTION LAY OVER CENTRAL PARTS OF SOUTH BOB AND ADJOINING EIO BETWEEN LATITUDE 2.0N & 10.0N AND LONGITUDE 82.0E & 90.0E IN ASSOCIATION WITH THE LOW LEVEL CIRCULATION OVER THE AREA . MINIMUM CLOUD TOP TEMPERATURE IS MINUS 88 DEG C. SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER SOUTH ANDAMAN SEA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER CENTRAL BAY OF BENGAL & NORTH ANDAMAN SEA.

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
LOW	MODERATE	HIGH	NIL	NIL

**ARABIAN SEA:**

SCATTERED LOW AND MEDIUM CLOUDS WITH EMBEDDED MODERATE TO INTENSE CONVECTION LAY OVER COMORIN AREA AND ISOLATED WEAK TO MODERATE CONVECTION LAY OVER EASTCENTRAL & SOUTHEAST ARABIAN SEA OFF KARNATAKA-KERALA COASTS.

**PROBABILITY OF CYCLOGENESIS (FORMATION OF DEPRESSION) DURING NEXT 120 HRS:**

24 HOURS	24-48 HOURS	48-72 HOURS	72-96 HOURS	96-120 HOURS
NIL	NIL	NIL	NIL	NIL

**REMARKS:**

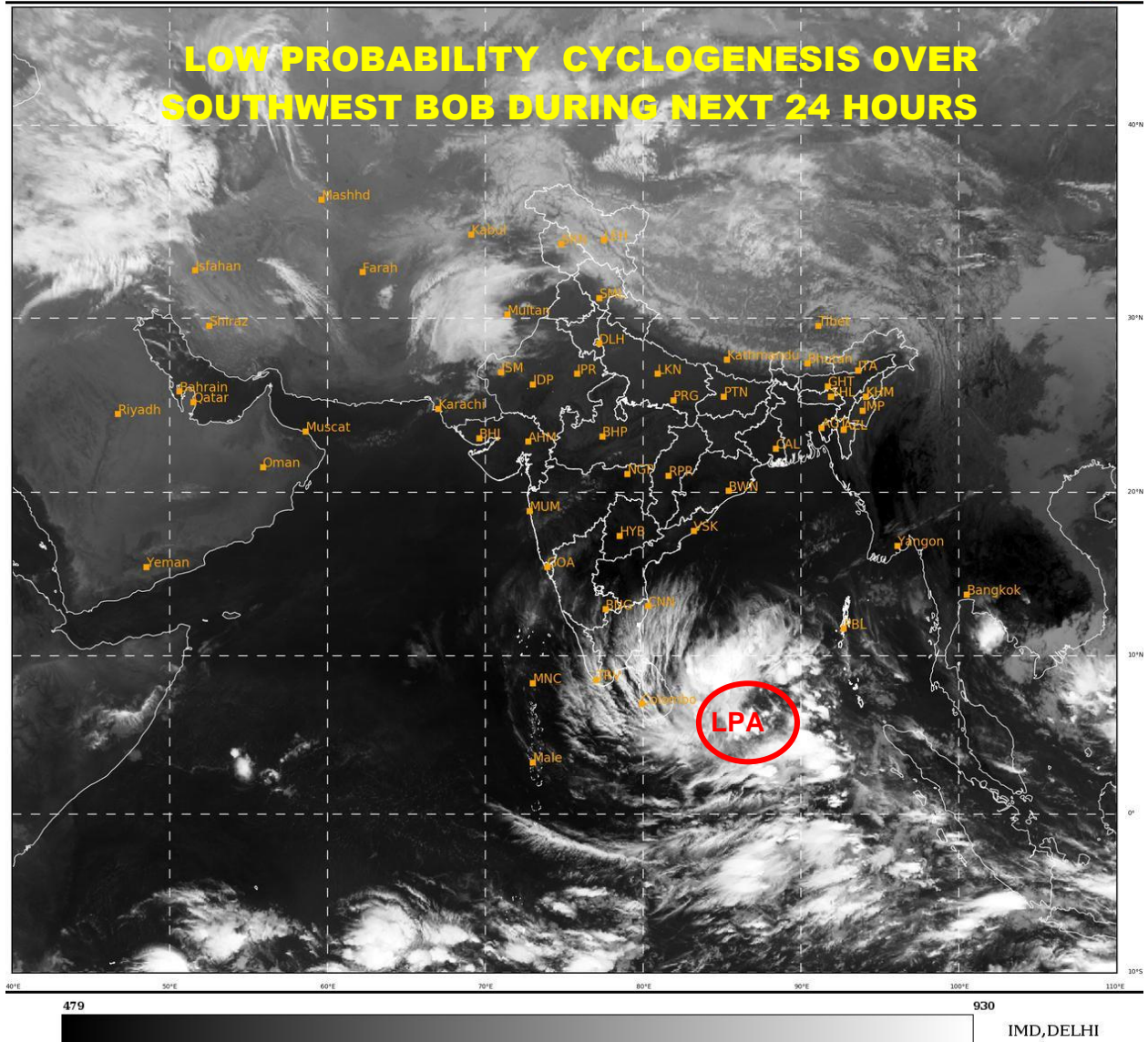
SEA SURFACE TEMPERATURE IS AROUND 28<sup>0</sup>C OVER SOUTH BOB. TROPICAL CYCLONE HEAT POTENTIAL IS AROUND 60-80 KJ/CM<sup>2</sup> OVER THE SAME REGION. THE MADDEN JULIAN INDEX (MJO) CURRENTLY LIES IN PHASE 5 WITH AMPLITUDE LESS THAN 1. IT IS LIKELY TO CONTINUE IN THE SAME PHASE FOR THE NEXT 2-3 DAYS WITH AMPLITUDE REMAINING LESS THAN 1. THE PHASE OF MJO IS CONDUCIVE FOR ENHANCED CONVECTION OVER THE BOB DURING NEXT 2-3 DAYS. FEEBLE EASTERLIES (1-3 MPS) ARE LIKELY TO PREVAIL OVER SOUTHWEST BOB DURING NEXT 2-3 DAYS. NO OTHER EQUATORIAL WAVE IS LIKELY TO PREVAIL OVER THE REGION DURING NEXT 5 DAYS.

LOW LEVEL VORTICITY HAS INCREASED SIGNIFICANTLY DURING PAST 24 HOURS AND IS AROUND 100 X10<sup>-6</sup> S<sup>-1</sup> OVER CENTRAL PARTS OF SOUTH BOB. VERTICALLY IT IS EXTENDING UPTO 500 HPA LEVEL. LOW LEVEL CONVERGENCE HAS INCREASED DURING PAST 24 HOURS AND IS AROUND 20 X10<sup>-5</sup> S<sup>-1</sup> OVER CENTRAL PARTS OF SOUTH BOB AROUND THE SYSTEM CENTRE. UPPER LEVEL DIVERGENCE HAS ALSO INCREASED IN PAST 24 HOURS AND IS AROUND 50 X10<sup>-5</sup> S<sup>-1</sup> OVER SOUTHWEST BOB TO THE WEST OF SYSTEM CENTRE. WIND SHEAR IS MODERATE (25 KNOTS) AROUND THE SYSTEM CENTRE WITH INCREASING TREND (BECOMING 30-35 KNOTS) TOWARDS SRI LANKA AND TAMIL NADU COASTS.

MOST OF THE NUMERICAL MODELS INCLUDING IMD GFS, ECMWF, GEFS, NCUM (G), NCUM (R) AND ECMWF ENSEMBLE ARE INDICATING LIKELIHOOD OF FORMATION OF DEPRESSION OVER SOUTHWEST BOB. HOWEVER, THERE IS VARIATION AMONG VARIOUS MODELS W.R.T. DATE OF FORMATION OF DEPRESSION VARYING FROM 3<sup>RD</sup> TO 4<sup>TH</sup> MARCH. THERE IS ALSO VARIATION AMONG VARIOUS MODELS W.R.T. PEAK INTENSITY.

VARIOUS ENVIRONMENTAL FEATURES AND MODEL GUIDANCE INDICATE DEVELOPMENT OF DEPRESSION OVER SOUTHWEST BOB WITH LIKELY MOVEMENT TOWARDS SRI LANKA AND FURTHER TOWARDS TAMIL NADU COASTS. HOWEVER, FURTHER INTENSIFICATION OF SYSTEM IS NOT LIKELY DUE TO HIGH WIND SHEAR, COMPARATIVELY COLDER SEA ALONG THE COAST OF TAMIL NADU AND ABSENCE OF ANY EQUATORIAL WAVE OVER THE REGION.

IN VIEW OF ALL THE ABOVE, IT IS INFERRED THAT THE LOW PRESSURE AREA OVER CENTRAL PARTS OF SOUTH BOB IS LIKELY TO BECOME WELL MARKED DURING NEXT 24 HOURS. IT IS LIKELY TO CONCENTRATE INTO A DEPRESSION DURING SUBSEQUENT 24 HOURS. IT IS LIKELY TO MOVE WEST-NORTHWESTWARDS TOWARDS SRI LANKA COAST DURING NEXT 24 HOURS AND TOWARDS TAMIL NADU COAST DURING SUBSEQUENT 24 HOURS.



LPA: LOW PRESSURE AREA