



No. F.2 (E)/2023-NDMA (TC Alert-IX)
Government of Pakistan
Prime Minister's Office
National Disaster Management Authority
Islamabad

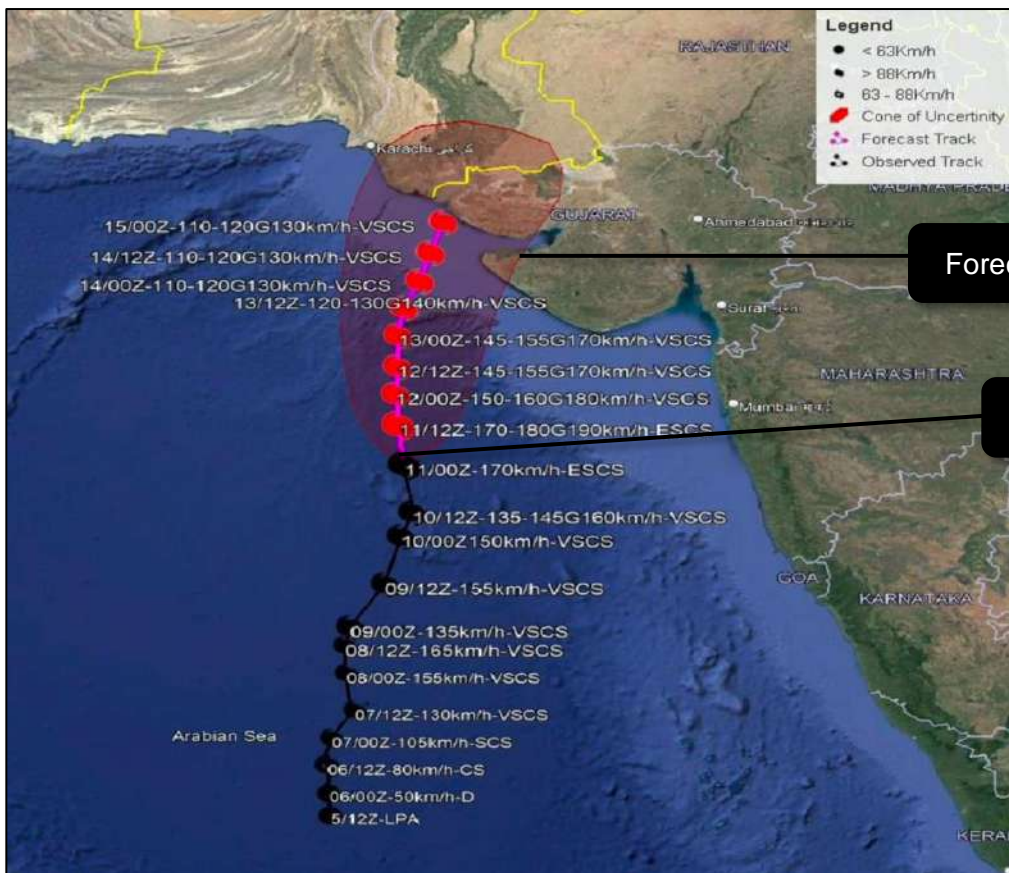
MOST IMMEDIATE

Dated: **11 June 2023**
1900 hours

Subject: Extremely Severe Cyclonic Storm "BIPARJOY" Over East-Central Arabian Sea
Reference: NDMA TC-Advisory No.F.2(E)/2023-NDMA(TC-Alert-VIII) dated 10 Jun 23

In continuation of above referred TC Advisory, PMD has informed (**Annex A**) that the Very Strong Cyclonic Storm (VSCS) "**BIPARJOY**" over east-central Arabian Sea has further **intensified into** an **Extremely Severe Cyclonic Storm** (ESCS). Updates on the development of BIPARJOY are as under: -

- | | | | |
|----|-----------------------|---|--|
| a. | Location | - | Latitude 18.1°N & Longitude 67.5°E |
| b. | Distance from Karachi | - | 760 km South of Karachi |
| c. | Wind Speed | - | sustained 150-160 km/h, 180 km/h gusts |
| d. | Max. Wave Height | - | 10.7-12.2 metres (35-40 feet) |
| e. | Forecasted direction | - | North (until morning of 14 June) |



2. Currently, favourable conditions are supporting ESCS BIPARJOY to maintain its intensity. The system is likely to track further **Northward** until **14 June** (morning), then

recurve **Northeastward** between **Keti Bandar, Southeast Sindh** and **Indian Gujrat Coast** on **16 June** as a **Very Severe Cyclonic Storm (VCSC)**.

3. Likely development path based on international weather forecasting models used by PMD is enclosed as **Annex B**, for proactive preparations against likely impacts. **It must be highlighted that this is an evolving situation and its impact will only be certain with further development of the system.**

4. Possible impacts under the current forecast are as under: -

- a. Widespread wind-dust/thunderstorm/rain with **very-extremely heavy falls & gusty winds** (80-100 km/h) expected in Districts **Thatta, Sujawal, Badin, Tharparkar & Umerkot** from **13 - 17 June 2023**.
- b. Dust/thunderstorm/rain, with few heavy falls & gusty winds (60-80 km/h) likely in Districts **Karachi, Hyderabad, Tando Muhammad Khan, Tando Allayar, Mirpurkhas** from **13 - 16 June 2023**.
- c. Squally / **highspeed-intensity winds** may damage loose structures, *kacha* houses, under construction buildings, trees and billboards along coastal areas and surroundings.
- d. **High risk of coastal flooding** in Districts **Badin and Thatta** as cyclone progresses / reaches coastline.
- e. Sea conditions to get **very high / phenomenal** with max wave height of **10.7-12.2 metres (35-40 feet)**, accompanied by **high tides along the coast**.
- f. Given **anticipated sea conditions, fishermen will not be able venture** out to open sea **until 17 June 2023**.
- g. **High risk of storm surge of 3-3.5 metres (8-12 feet)** along coastline from Karachi to Indian Gujrat, **especially at landfall point in Keti Bandar & surrounding area**, which may be further **exasperated twice daily by occurrence of high tide**. Details of high tide times as **provided by National Institute of Oceanography (NIO)** are as below: -

Day	Keti Bandar		Sir Creek		Karachi		Gharo	
	1st High Tide	2nd High Tide	1st High Tide	2nd High Tide	1st High Tide	2nd High Tide	1st High Tide	2nd High Tide
Tue 13	7:31am	6:42pm	8:26am	7:37pm	7:31am	6:42pm	7:31am	6:42pm
	▲ 2.5 m	▲ 2.9 m	▲ 2.3 m	▲ 2.7 m	▲ 2.2 m	▲ 2.6 m	▲ 2.2 m	▲ 2.6 m
Wed 14	8:39am	7:30pm	9:34am	8:25pm	8:39am	7:30pm	8:39am	7:30pm
	▲ 2.7 m	▲ 2.9 m	▲ 2.5 m	▲ 2.7 m	▲ 2.4 m	▲ 2.6 m	▲ 2.4 m	▲ 2.6 m
Thu 15	9:32am	8:15pm	10:27am	9:10pm	9:32am	8:15pm	9:32am	8:15pm
	▲ 2.9 m	▲ 2.9 m	▲ 2.7 m	▲ 2.7 m	▲ 2.6 m	▲ 2.6 m	▲ 2.6 m	▲ 2.6 m
Fri 16	10:17am	8:56pm	11:12am	9:51pm	10:17am	8:56pm	10:17am	8:56pm
	▲ 3 m	▲ 2.8 m	▲ 2.8 m	▲ 2.6 m	▲ 2.7 m	▲ 2.5 m	▲ 2.7 m	▲ 2.5 m
Sat 17	10:56am	9:36pm	11:51am	10:31pm	10:56am	9:36pm	10:56am	9:36pm
	▲ 3.1 m	▲ 2.8 m	▲ 2.9 m	▲ 2.6 m	▲ 2.8 m	▲ 2.5 m	▲ 2.8 m	▲ 2.5 m

5. The guidelines for all concerned stakeholders are as under: -

a. **Disaster Management Stakeholders**

- i. Ensure **vigilant monitoring of the tropical cyclone's development** and ensure **proactive coordination** through respective emergency operation centres.
- ii. Verify the **functionality of early warning systems** and ensure prompt dissemination of **timely and accurate information** to at-risk communities.
- iii. Utilize **multiple communication channels**, such as **television, radio, social media** and **SMS alerts**, to conduct extensive and continuous **awareness campaigns** to effectively reach coastal communities, educate the public on the **potential impacts** of the cyclone, **emergency evacuation procedures** and **safety measures**.
- iv. Respective PDMA's/DDMA's, **Rescue Agencies** (Rescue 1122, Civil Defence, Fire Departments, Paramedics), and concerned departments may identify **high-risk / low lying areas prone to storm surges, coastal flooding, urban flooding**, high speed winds and **develop / enact evacuation plans** accordingly.
- v. Coordinate with relevant district and municipal administrations to ensure **preparedness measures for thunderstorms/flash flooding, highspeed winds, storm surge** and secure or remove billboards/hoardings.
- vi. Ensure **immediate stocking of basic commodities** including **paramedics & medicine**, especially in regions that are likely to get cut-off during severe weather events.
- vii. Collaborate with relevant authorities, including law enforcement agencies and transportation departments, to facilitate the **safe evacuation of people from vulnerable coastal areas/low-lying areas**.
- viii. Advise individuals residing in **unsecured mud ("kacha") houses and low-lying areas** to **seek shelter** in sturdier / more secure buildings, higher ground for personal safety.
- ix. Coordinate with relevant departments, including NHA/FWO/C&W and line departments, to **assess and prepare for any potential damage to roads, bridges**, and other **critical infrastructure**.
- x. Ensure the availability of **necessary equipment and resources** for rapid response and recovery operations, including **road clearance** and

restoration of utility services.

- xi. Electric companies, i.e. K-Electric should ensure safety measures are in place to **prevent electrical hazards** during the cyclone and ensure rapid restoration of services in case of disruption.
- xii. Take all necessary measures to **address inundation issues** in Karachi, Hyderabad Divisions and surrounding regions, caused by heavy rainfall, coastal floods and storm surges.
- xiii. Implement **dewatering plans for underpasses in Karachi** to prevent urban flooding.
- xiv. Verify the **functionality of nullahs/sewerage systems** and ensure their proper maintenance on emergency basis to **prevent waterlogging and drainage issues**.
- xv. Coordinate with **hospitals to place them on alert status and arrange alternate energy sources**, such as generators, in case of power outages to ensure uninterrupted medical services.
- xvi. Advise relevant District Administrations to **take precautionary measures in low lying areas against effects from storm surge activity**.
- xvii. **NEOC at NDMA** has been made functional **round the clock for TC BIPARJOY monitoring and coordination**. All concerned to timely and proactively update NDMA and other stakeholders on the cyclone's progress, potential impacts, and response measures.

b. **Local Communities**

- i. Engage local communities at traditionally / historically hazard-prone sites to enable **round-the-clock monitoring**.
- ii. Advise local communities to adhere to directives of Local Administration on emergency evacuation procedures.
- iii. Advise **fishermen to exercise appropriate caution** while in coastal areas.
- iv. **Fishermen to NOT VENTURE into the open sea until 17 June 2023**.
- v. Establish a reliable communication system to deliver **real-time weather updates and guidance to fishing communities**.
- vi. **Farmers / cattle herders** to be advised to take all necessary mitigative and precautionary measures to **safeguard their crops and livestock**, i.e. timely harvesting, safe storage, safe sheltering or any precaution from adverse effects of dust-wind-thunderstorms.

vii. **Stay away from electric poles and wires** during the cyclone to avoid electrical hazards.

6. **Three hourly updates on developing weather system will be uploaded on NDMA's website and social media handles for reference of all stakeholders.**

All concerned are requested to **ensure continuous monitoring and proactive preparations** against likely impacts.

7. Forwarded for your further necessary action, please.



(Muhammad Ali Khan)

Director (Response)

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(Distribution List Below)

Distribution List

To: Chief Secretary, Government of Balochistan, Quetta
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Chairman, Sindh Coastal Development Authority, Karachi
Managing Director, K-Electric Karachi
Country Coordinator, UNOCHA, Islamabad
Coordinator, Welthungerhilfe (WHH), Islamabad
Country Coordinator, Pakistan Humanitarian Forum, Islamabad
Chairperson, National Humanitarian Network, Islamabad

Cc: Secretary to Prime Minister, Prime Minister's Office, Islamabad
Secretary, Cabinet Division, Islamabad
Chairman, Federal Flood Commission, Islamabad
Joint Crises Management Cell, Joint Staff Headquarters, Chaklala Cantt
Military Operations Directorate (MO-4), General Headquarters, Rawalpindi Cantt
ACNS (Operations), Naval Headquarters, Islamabad
ACAS (Operations), Air Headquarters, Islamabad
GSO-1, Inter-Services Public Relations, General Headquarters, Rawalpindi Cantt

PMD Press Release – TC Alert 11

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TC- Alert 11

Date: 11 June 2023
 Time: 1030 PST

Extremely Severe Cyclonic Storm (BIPARJOY) over East-central Arabian Sea

The Very Severe Cyclonic Storm (VSCS) “BIPARJOY” over eastcentral Arabian Sea has further intensified into an Extremely Severe Cyclonic Storm (ESCS), moved northward during last 12 hours and now lies near Latitude 18.1°N & Longitude 67.5°E at a distance of about 760km south of Karachi, 740km south of Thatta & 840km southeast of Ormara. Maximum sustained surface winds are 150-160 Km/hour gusts 180 Km/hour around the system center with and sea conditions being phenomenal around the system center with maximum wave height 35-40 feet. The favorable environmental conditions (sea surface temperature of 30-32°C, low vertical wind shear & upper-level divergence) are supporting the system to maintain its intensity.

Under the existing upper-level steering winds, the ESCS “BIPARJOY” is most likely to track further Northward until 14 June morning, then recurve Northeastward and cross between Keti Bandar (Southeast Sindh) and Indian Gujarat coast on 15 June afternoon as a Very Severe Cyclonic Storm (VSCS). PMD’s cyclone warning center, Karachi is continuously monitoring the system and will issue update accordingly.

Possible Impacts:

- With its probable approach to the southeast Sindh coast, widespread wind-dust/thunderstorm rain with some very heavy/extremely heavy falls accompanied with squally winds of 80-100Km/hour likely in Thatta, Sujawal, Badin, Tharparker & Umerkot districts during 13-17 June.
- Dust/thunderstorm-rain with few heavy falls & accompanied with squally winds of 60-80 Km/hour likely in Karachi, Hyderabad, Tando Muhammad Khan, Tando Allayar, Mirpurkhas districts from 13/14 June -16 June.
- Squally (high intensity) winds may cause damage to loose & vulnerable structures (Kutchha houses).
- Storm surge of 3-3.5 meters (8-12 feet) expected at the land falling point (Keti Bandar and around).
- Fishermen are advised not to venture in open sea till the system is over by 17 June, as the Arabian Sea conditions may get very rough/high accompanied with high tides along coast.

Forecasted Path of TC BIPARJOY by PMD

