



F.6 (F)/2016-NDMA (MW/Ctgy Plan)
Government of Pakistan
Ministry of Climate Change
National Disaster Management Authority
Prime Minister's Office Islamabad



Dated: 18 March 2016

Subject: **Preparation for Monsoon 2016**

Pakistan Meteorological Department has issued the **Seasonal Outlook for Spring and Early Summer 2016** which states that “*Prevailing oceanic, atmospheric and surface climatic conditions suggest that uncertainties in Pakistan’s weather pattern will persist towards the early Summer till the El Nino comes to neutral phase in May – June 2016*” as explained at **Annex A**. Outlook for the next three months has been prepared based upon regional and global weather conditions incorporating the dynamics of climatic system. Following are the **highlights of weather** in Spring and early Summer:-

- a. **March and April** are expected to be **wetter than normal**. Frequent spells of rainfall and isolated hailstorms associated with windstorm may hamper the harvesting and threshing of wheat and sowing of cotton.
 - b. **May and first half of June** are likely to remain **drier and hotter than normal**. That would increase the probability of occurrence of **heatwaves over plains and coastal belt of the Country**.
 - c. Heatwave conditions in **Gilgit-Baltistan and Chitral** may accelerate glacier melting and **trigger Glacier Lake Outburst Flooding (GLOF)** events in the coming Summer season.
 - d. Due to intense heating, **Monsoon onset is expected to be early during second half of June 2016**.
 - e. El Nino is **declining** and global climate models predict it to run in the **neutral phase** during **Monsoon season**.
2. The **major conclusions** drawn from Pakistan Meteorological Department’s Seasonal Outlook for Spring and Early Summer 2016 are as under:-
- a. Owing to the decaying El Nino phenomenon, an unusual spell of rains would affect **flow in rivers as well as possible flash flooding** during the month of March and April 2016.
 - b. Snow residency period is likely to be short lived. Sudden rise in temperature and increase in melting may result into **high level of**

discharge in rivers. Flood rehabilitation / protection works may get disrupted in such situation.

- c. Expected increased inflow in rivers will require careful regulation of dam operations.
- d. The **heatwave** may impact the Urban Centres having congested localities which may get compounded if shortage of water and disruption in electricity exists.
- e. Early start of Monsoon may **compress the preparedness time** for Monsoon activities.

3. The **National Monsoon Contingency Response Directive 2016 will be issued in due course of time**, after consultation with all stakeholder / conclusion of Provincial Coordination Conferences. However, following precautionary measures, based on the ***concept of striking a fine balance between avoiding panic and shaping a reality check*** will be resorted to by all relevant stakeholders during the preparedness / coordination phase for Monsoon 2016:-

- a. All points highlighted in the **National Post Monsoon Review Conference 2015, issued vide letter No F.2 (E) / 2016-NDMA (MW / Mins of Meeting) dated 22 January 2016** must be kept in focus. Some of the important agenda points are reiterated as:-
 - (1) Maintenance of relief stocks by all PDMAs especially SDMA AJ&K and GBDMA to build respective stocking capacity.
 - (2) Mapping of encroachments in river plains and contingency planning for their organized evacuation.
 - (3) Objective review, determination, revision and dissemination of flood discharge lag time of all rivers by FFC.
 - (4) Rehabilitation of critical flood protection infrastructures.
 - (5) Procurement of an optimum number of bailey bridges for KP, AJ&K and GB by NHA.
 - (6) Installation of telemetry gauge at Mithankot as well as Sutlej River. Requirement of monitoring flood water from hill torrents of D.G Khan and Rajanpur needs to be addressed.
 - (7) Requirement of meeting flood management equipment of Pak Army by respective PDMAs, at priority.
- b. The **flood protection and rehabilitation** works must be completed before **31 May 2016** / before start of month of Ramazan.
- c. Community awareness campaign may be started early, as deemed appropriate.

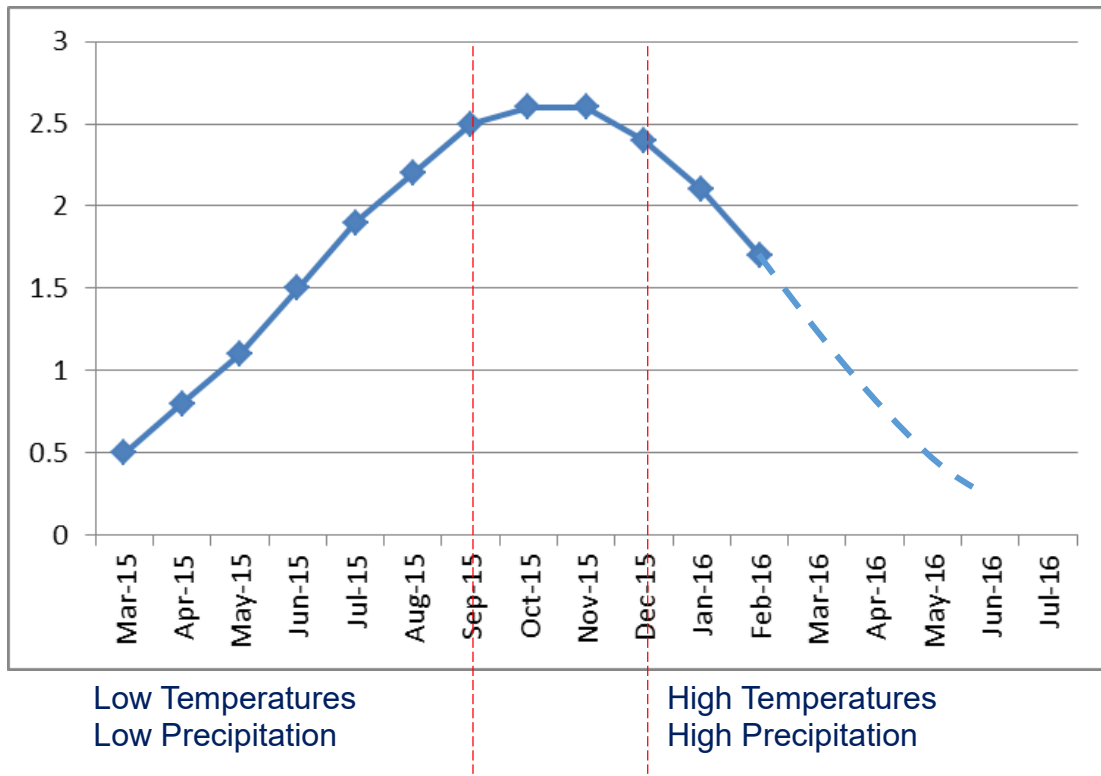
- d. Mitigation measures of **Urban Flooding** like clearance / dredging of drainage system / network, serviceability of sewage disposal stations, serviceability of heavy duty dewatering pumps / backup generators for sewerage disposal, water supply network system.
- e. All stocking level must be maintained and procurement of relief and rescue items must be initiated and procured well before month of June 2016.
- f. Water level in rivers must be constantly monitored.
- g. Planning for the vulnerable groups must be ensured.
- h. The repositioning of earth moving machinery especially in the mountainous areas of Khyber Pakhtunkhwa and Gilgit-Baltistan must be coordinated well in advance.
- i. Community based Early Warning System against flash flooding and GLOF must be coordinated and rehearsed (Khyber Pakhtunkhwa, AJ&K and Gilgit-Baltistan). Some of the measures to reduce GLOF impacts are:-
 - (1) Mapping of potential vulnerable areas to GLOFs; distances of glacier lakes from settlements and preparation of contingency plans covering evacuation of affected population.
 - (2) Continuous monitoring of the glaciers and glacier lakes and keeping a strict watch on temporal changes and corresponding impact on river system flows.
 - (3) Immediate measures to remove / control reported cracks in rocks / mountains, potential land slide areas and other actions that can lead to GLOFs.
 - (4) Conduct of GLOF preparedness Early Warnings (GEW), disaster management drills / mock exercises of GLOF incidence preparedness in GLOF prone areas.
 - (5) Conducting demonstrations on mitigation and adaptation measures for glacial melt and reducing disaster risks resulting from GLOFs.
- j. Some of the precautionary measures against anticipated heatwaves are:-
 - (1) Resource mapping including planned heat stroke stabilization centres / relief centres at government / private hospitals, basic health units (BHU), available buildings which can be used as relief centres with generator based electricity and assured provision of water be finalized by 10 April 2016 by all PDMAs.
 - (2) Enhanced and proactive inter departmental coordination mechanism especially with emergency services.

- (3) Assured provision of heat stroke related medicines.
 - (4) Awareness campaign through electronic and print media coverage to educate the public on preventive measures.
 - (5) To facilitate timely response, all PDMA's are requested to establish helpline with its widespread circulation from 1 May 2016 onwards.
 - (6) Contingency planning for emergency provision of water be finalized well before May 2016.
 - (7) Coordination with WAPDA / concerned Electric Supply Company for assured supply of electricity.
 - (8) Ensure availability of sufficient ambulances in Govt hospitals.
 - (9) During Ramazan, special measures to be adopted and public education / awareness campaign be enhanced.
4. Forwarded for information and preparation, please.

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Distribution List. Attached.

CLIMATE MONITORING – EL NINO OUTLOOK



*In coming few months high probability of **Freak Weather**
due to high temperatures & high precipitation*

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