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# **Institutional Aspects of Flood Management In Pakistan**

Working Group :  
AWCI

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Pacific**





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# Pakistan Flood Management Challenge





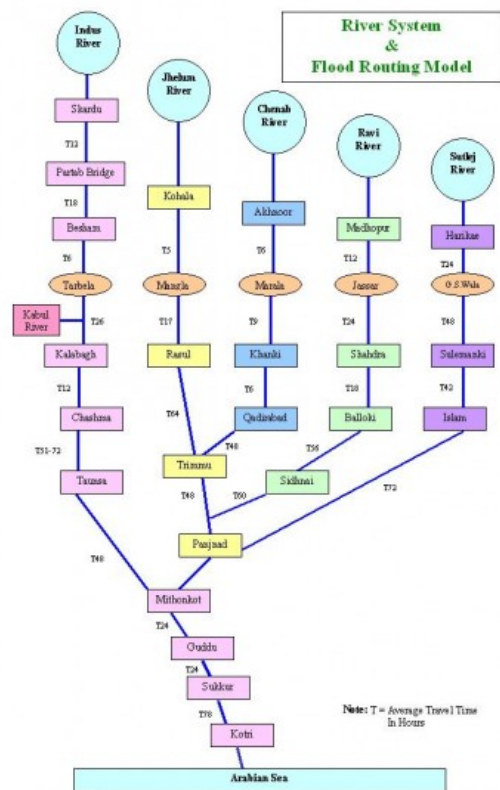


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# A Complex Interconnected River System



Source: Flood Forecasting Division, Pakistan Meteorological Department





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## **FLOOD MANAGEMENT – AGENCIES INVOLVED**

1. NDMC, NDMA, PROVINCIAL
2. FEDERAL FLOOD COMMISSION (FFC)
3. SUPARCO
4. PAKISTAN METROLOGICAL DEPARTMENT (NATIONAL FLOOD FORECASTING DIVISION ,NFFD)
5. WAPDA
6. PAKISTAN COMMISSIONER FOR INDUS WATERS (PCIW)
7. PAKISTAN ARMY
8. PROVINCIAL IRRIGATION AND POWER DEPARTMENTS (PIDS/PIDAS)
9. EMERGENCY RELIEF CELL, CABINET DIVISION, ISLAMABAD
10. PROVINCIAL FLOOD RELIEF DEPARTMENTS
11. POLICE DEPARTMENT
12. PAKISTAN FOREST DEPARTMENT
13. PAKISTAN RAILWAYS
14. INFORMATION DEPARTMENT
15. PROVINCIAL COMMUNICATION DEPARTMENTS
16. DISTRICT ADMINISTRATIONS

# National Disaster Management Authority (NDMA)

- National Disaster Management Authority (NDMA), is the lead agency at the Federal level to deal with whole spectrum of Disaster Management Activities.
- It is the executive arm of the National Disaster Management Commission (NDMC), under the Chairmanship of the Prime Minister
- In the event of a disaster all stakeholders, including Government Ministries/Departments/Organizations, Armed Forces, INGOs, NGOs, UN Agencies work through and from part of the NDMA to conduct one window operation.
- NDMA aims to develop sustainable operational capacity and professional competence



# FUNCTIONS OF FEDERAL FLOOD COMMISSION

- I) PREPARATION OF NATIONAL FLOOD PROTECTION PLANS
- II) APPROVAL OF FLOOD CONTROL SCHEMES PREPARED BY PROVINCIAL GOVERNMENTS AND CONCERNED FEDERAL AGENCIES
- III) REVIEW OF FLOOD DAMAGES TO PUBLIC SECTOR INFRASTRUCTURE AND REVIEW OF PLANS FOR RESTORATION AND RECONSTRUCTION WORKS
- IV) MEASURES FOR IMPROVEMENTS IN FLOOD FORECASTING AND WARNING SYSTEM
- V) STANDARDIZATION OF DESIGNS AND SPECIFICATIONS FOR FLOOD PROTECTION WORKS
- VI) EVALUATION AND MONITORING RELATING TO PROGRESS OF IMPLEMENTATION OF THE NATIONAL FLOOD PROTECTION PLAN(NFPP)
- VII) PREPARATION OF A RESEARCH PROGRAM FOR FLOOD CONTROL AND PROTECTION
- VIII) RECOMMENDATIONS REGARDING PRINCIPLES OF REGULATION OF RESERVOIRS FOR FLOOD CONTROL

NOTE: RESPONSIBILITY OF IMPLEMENTATION RESTS WITH THE PROVINCES



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## **ROLE OF WAPDA DURING FLOODS**

- FLOOD SEASON (JUNE 15 – OCT. 15)
- TRANSMISSION OF RAINFALL & RUNOFF DATA TO NFFD – LAHORE
  - a) *FLOOD FORECASTING TELEMETERY NETWORK*
  - b) *HIGH FREQUENCY RADIO COMMUNICATION NETWORK*
- OPERATION OF TARBELA, MANGLA AND CHASHMA RESERVOIRS.

# **RESERVOIRS OPERATION**

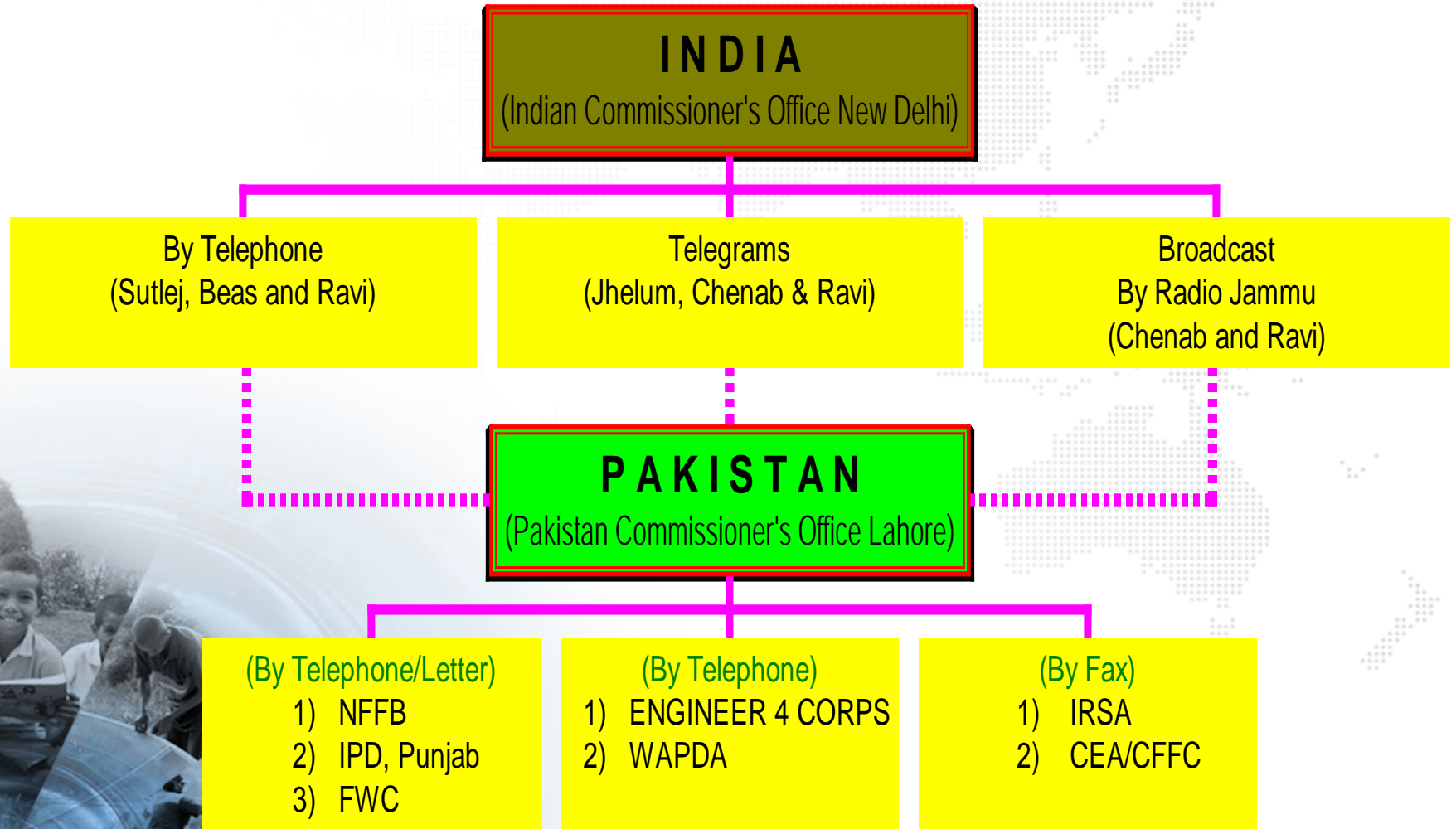
- **BASIC OBJECTIVE – WATER CONSERVATION**
- **FLOOD REGULATION – Secondary**
- **OPERATION ACCORDING TO PRE-DETERMINED CRITERIA (SoP)**
  - **PROJECT SAFETY – TOP PRIORITY**
  - **Flood Warnings (Low , Medium, High)during filling and Maximum Conservation Level**
  - **Temporary rise above maximum conservation level**
  - **Conjunctive operation**





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# RECEIVING/DISEMINATION OF FLOOD/BASE FLOW DATA





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Thank you very much!

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