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Educational, Scientific and
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International
Hydrological
Programme

Institutional Aspects of Flood Management In Pakistan

Working Group :
AWCI

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Regional Science Bureau for Asia and the
Pacific**

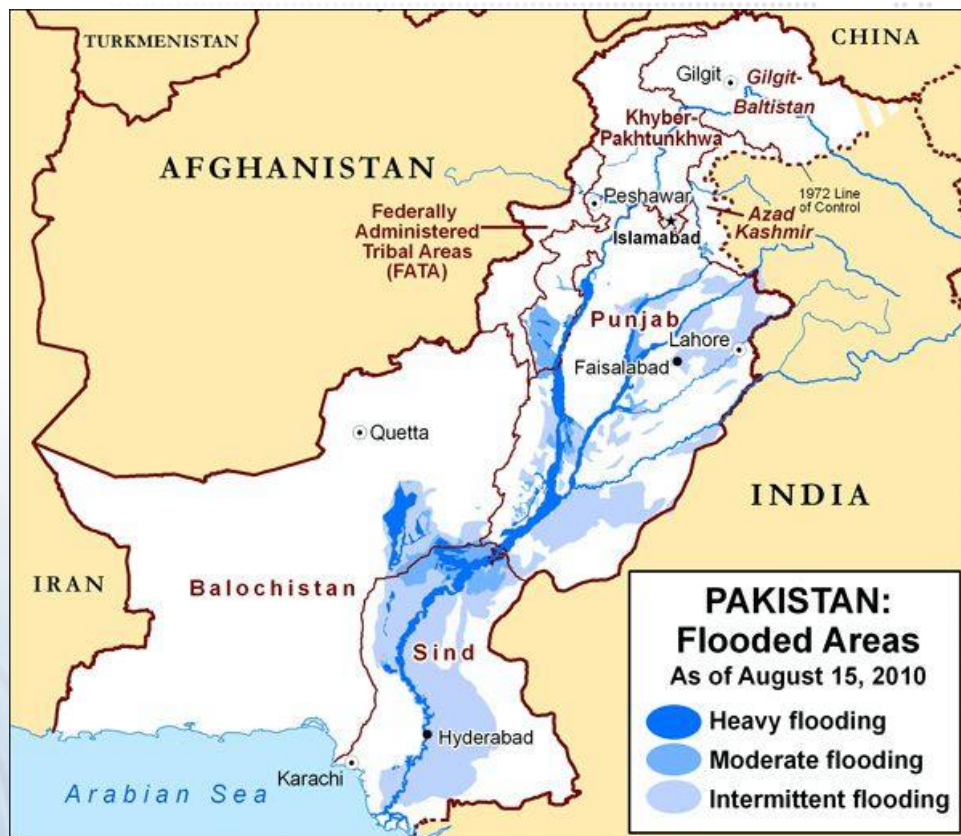


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Pakistan Flood Management Challenge



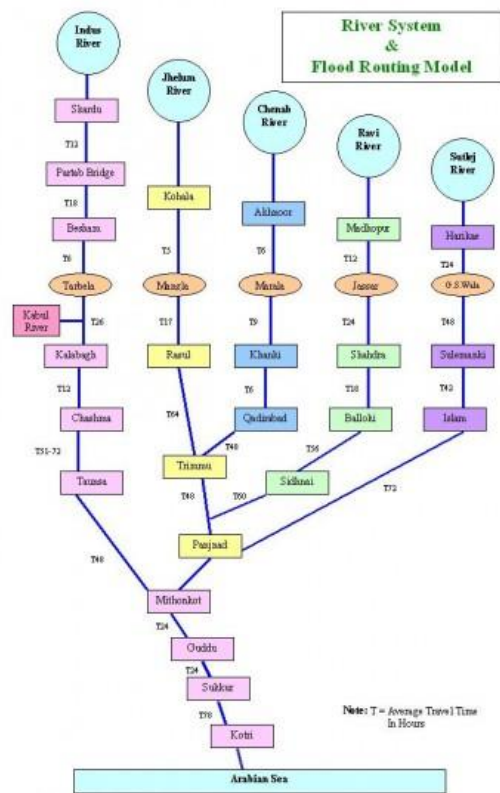


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A Complex Interconnected River System





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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

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

INDIA

(Indian Commissioner's Office New Delhi)

By Telephone
(Sutlej, Beas and Ravi)

Telegrams
(Jhelum, Chenab & Ravi)

Broadcast
By Radio Jammu
(Chenab and Ravi)

PAKISTAN

(Pakistan Commissioner's Office Lahore)

(By Telephone/Letter)
1) NFFB
2) IPD, Punjab
3) FWC

(By Telephone)
1) ENGINEER 4 CORPS
2) WAPDA

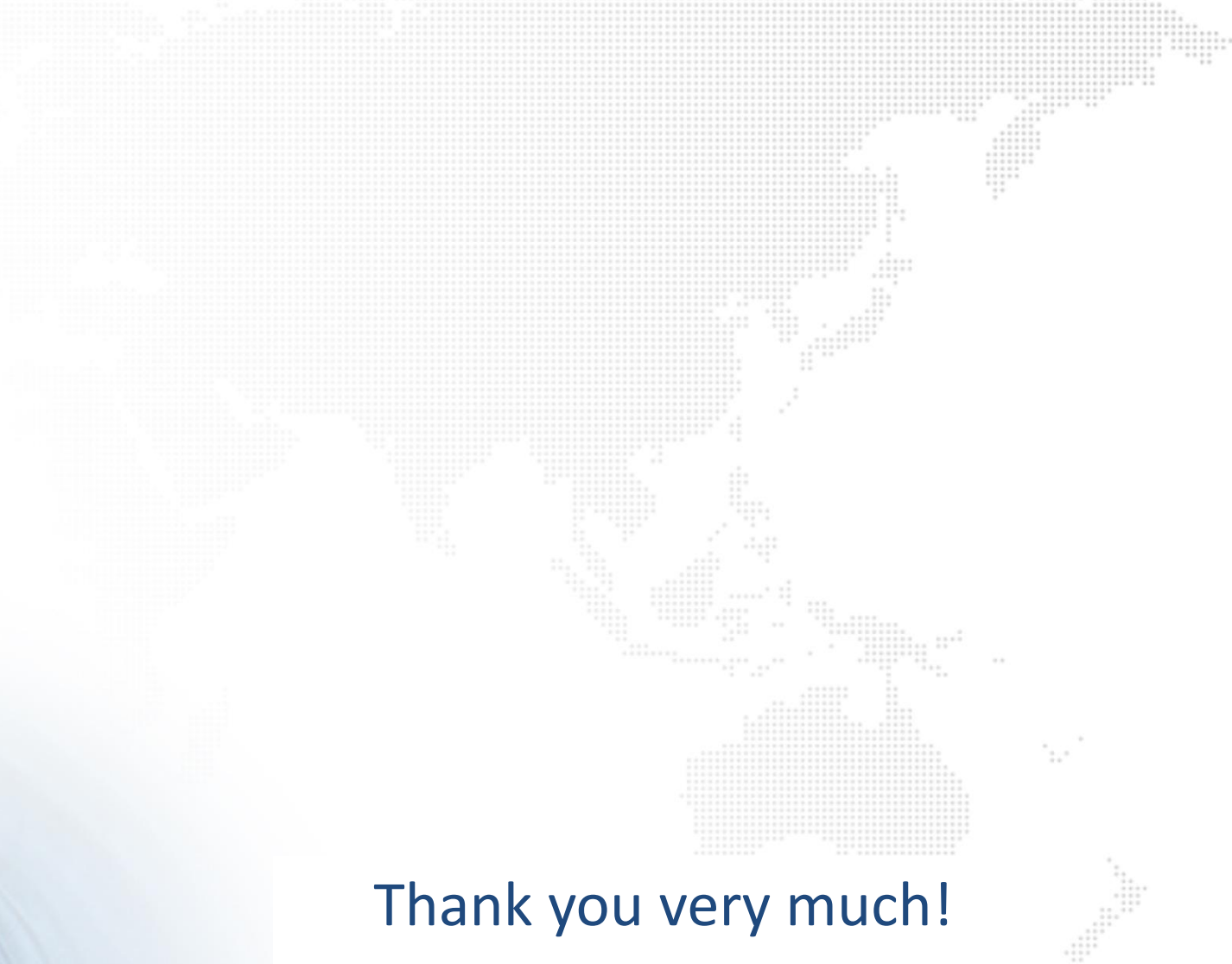
(By Fax)
1) IRSA
2) CEA/CFFC



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Thank you very much!

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