



FLOODS

FLOODS IN PAKISTAN:

A flood is a large amount of water overflowing land that is usually dry. In Pakistan, this often happens due to:

Heavy Monsoon Rains (June-Sept):

These intense downpours can overwhelm rivers and drainage systems.

Melting of Snow and Glaciers:

As temperatures rise, glaciers melt, adding significant water to already swollen rivers.



TYPES OF FLOOD



RIVERINE FLOODING

They occur when rivers overflow their banks, inundating surrounding areas.



FLASH FLOODING

Fast, dangerous floods that rise quickly (in hours) after heavy rain.



URBAN FLOODING

when heavy rain overwhelms a city's drainage system.



COASTAL FLOODING

are caused by storm surges, which are abnormal rises in sea level caused by storms.



FLASH FLOODS

FLASH FLOODS IN PAKISTAN:

Pakistan experiences frequent flash floods, particularly during the monsoon season (July-August) as well as in winter season due to heavy rainfall in the mountains and foothills. These rapid inundations cause losses of in life, property, and infrastructure, especially in Khyber Pakhtunkhwa, AJ&K, Gilgit Baltistan and Balochistan provinces

CAUSES OF FLASH FLOOD



HEAVY RAINS

Heavy monsoon rains overwhelm drainage systems, causing flash floods in Pakistan.



GLACIAL MELT

Rising temperatures melt northern glaciers, increasing river flow and causing floods.



DEFORESTATION

Deforestation reduces rain absorption, causing runoff and floods.



URBANIZATION

Unplanned urbanization causes poor drainage and increases flood risk.



TOPOGRAPHY

Mountainous terrain and narrow valleys amplify heavy rainfall, causing severe flash floods



CLIMATE CHANGE

Climate Change leads to extreme, unpredictable weather and heavier rain, causing flash floods



RIVER ENCROACHMENTS

Poor infrastructure fails during intense rain, causing flooding.



POOR WATER MANAGEMENT

Lack of proper flood control infrastructure like dams and levees, can exacerbate the impact



SEDIMENTATION

Soil erosion fills rivers, reducing capacity and causing overflow in heavy rains.



INFRASTRUCTURE FAILURES

Poor infrastructure fails in heavy rain, causing floods.

BE PREPARED FOR FLASH FLOODS



ACTIONS BY ORGANIZATIONS

PRE



EARLY WARNING SYSTEMS

Develop and implement community level early warning systems to alert communities of potential flash floods.



COMMUNITY AWARENESS

Educate residents on flood risks, evacuation routes, and emergency plans.



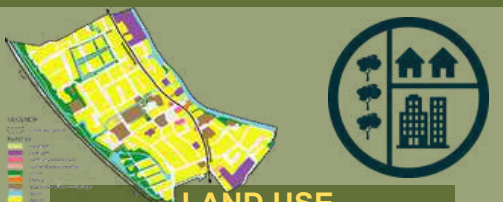
INFRASTRUCTURE DEVELOPMENT

Build and maintain dams, levees, gabion wall and retention ponds to control floods.



VEGETATION AND SOIL MANAGEMENT

Promote afforestation and soil conservation to enhance water absorption and reduce runoff.



LAND USE PLANNING

Enforce zoning to prevent construction in flood zones and preserve drainage.

DURING



ADVISORIES & ALERTS

Activate early warning systems to alert communities and provide real-time information on flood progression.



EVACUATION PLANS

Execute evacuation plans to move residents to safety



RESCUE OPERATIONS

Deploy swift-water rescue teams equipped to assist stranded individuals and animals.



ROAD CLOSURE AND TRAFFIC MANAGEMENT

Close roads and manage traffic to prevent accidents and facilitate emergency response efforts.



PROVIDE REAL-TIME UPDATES

Communicate flood updates and safety instructions through multiple channels to keep residents informed.

POST



DAMAGE ASSESSMENT

Conduct rapid assessments of infrastructure damage and affected areas to prioritize recovery efforts.



RELIEF ASSISTANCE

Provide immediate relief and assistance to affected individuals.



HEALTH AND SANITATION

Provide medical aid, clean water, and sanitation to prevent disease after floods.



FLOOD RISK REDUCTION

Long-term measures such as improved drainage systems, land use planning revisions.



REHABILITATION & RECONSTRUCTION

Restore infrastructure and rebuild homes promptly.

BE PREPARED FOR FLASH FLOODS



ACTIONS BY COMMUNITY AND INDIVIDUALS

PRE



STAY INFORMED

Stay informed about weather forecasts and flood alerts.



PREPARE AN EMERGENCY KIT

Prepare an emergency kit with essentials like food, water, medications, and documents.



KNOW EVACUATION ROUTES

Build and maintain dams, levees, gabion wall and retention ponds to control floods.



EARLY WARNING SYSTEMS

Establish and maintain early warning systems to alert residents of potential floods.



CONDUCT DRILLS

Conduct drills and exercises to practice evacuation procedures.

DURING



EVACUATE TO HIGHER GROUND

Evacuate to higher ground immediately if advised by authorities.



AVOID FLOOD WATERS

Avoid walking or driving through floodwaters; they may be deeper or faster-flowing than they appear.



FOLLOW INSTRUCTIONS

Follow instructions from emergency services and local authorities



ENGAGE VOLUNTEERS

Engage volunteers for emergency response and build shelters for displaced residents.



COORD WITH OTHER COMMUNITIES

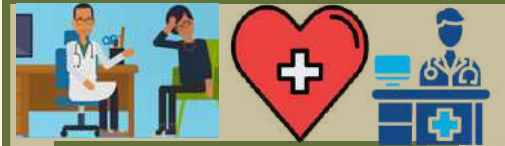
Coordinate with neighboring communities and authorities for flood condition, mutual aid and support

POST



ASSESS DAMAGE TO PROPERTY

Assess damage to property and prioritize safety during cleanup efforts.



SEEK MEDICAL ATTENTION

Seek medical attention for injuries or illnesses related to the flood.



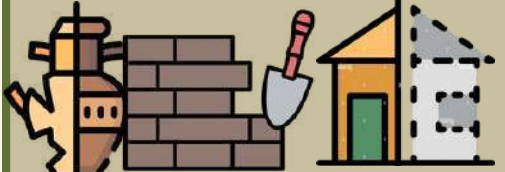
ORGANIZE COMMUNITY CLEANUP

Organize community cleanup efforts to remove debris and restore infrastructure.



PROVIDE SUPPORT SERVICES

Provide support services such as counseling and relief assistance to affected individuals and families.



FLOOD MITIGATION MEASURES

Implement long-term flood mitigation measures like improving drainage systems and resilience.