



GOVERNMENT OF PAKISTAN

PAKISTAN

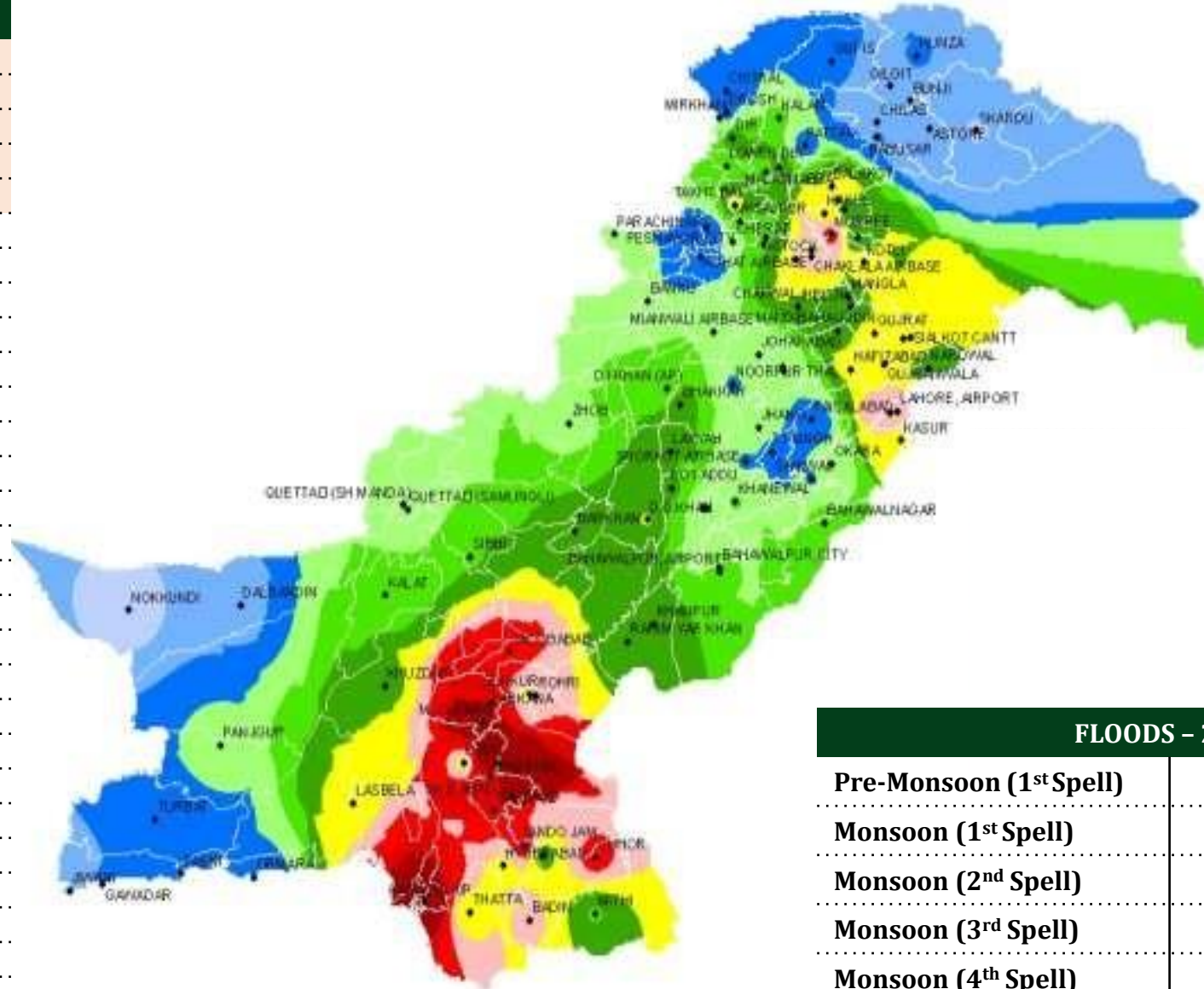
Floods 2022 and Beyond



IMPACT OF FLOODS – 2022



STATIONS	July-Aug
PADIDAN (N.feroze)	1,752.58
KARACHI A/P	1,185.24
M.JO.DARO	990.54
LARKANA	893.36
SAKRAND	827.02
TANDO JAM	800.92
JACOBABAD	782.05
CHHOR	750.7
MURREE	742.01
SH.B.ABAD	661.04
ROHRI	652.04
BADIN	642.41
CHAKLALA AIRBASE	635.57
LAHORE, AIRPORT	618.74
ISLAMABAD, AIRPORT	605.18
LAHORE, CITY	595.46
TAKHT BAI	579.84
SIALKOT CANTT	579.14
KOTLI	576.4
ISLAMABAD	571.34
LASBELA	562.22
HYDERABAD	559.03
SUKKUR	552.53
DADU	547.22
GUJRANWALA	546.83
SIALKOT AIRPORT	543.17
GUJRAT	539
KAKUL	523.04
KASUR	522.53



- 500+ mm
- 300 – 500 mm
- 100 – 300 mm

FLOODS – 2022

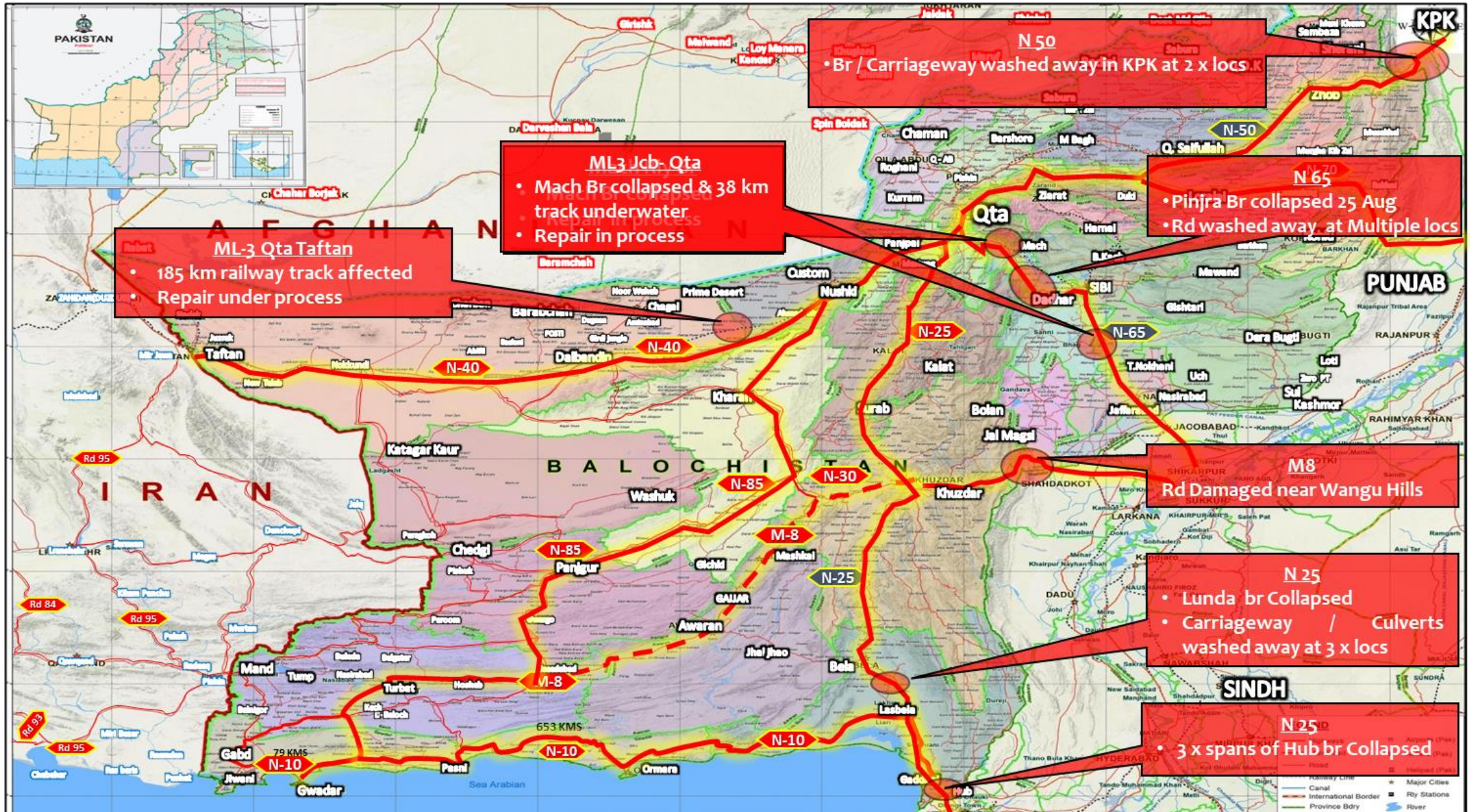
Pre-Monsoon (1 st Spell)	20 – 25 June, 2022
Monsoon (1 st Spell)	1 – 9 July, 2022
Monsoon (2 nd Spell)	23 – 28 July, 2022
Monsoon (3 rd Spell)	5 – 13 August, 2022
Monsoon (4 th Spell)	23 – 26 August, 2022

Source: Pakistan Meteorological Department

CUMULATIVE RAINFALL – 1 JUL TO 8 SEP 22

Wednesday, November 9, 2022

Disruptions to Communication Networks



Railways Infrastructure Damaged





Severe flooding

Triggered by heavy rainfall nearly 300% more
than the national 30-year average

1,638 fatalities, 12,865 injuries and more than 33
million people affected

Out of a total of 160 districts, 118 districts
are officially declared as calamity hit

Source: National Disaster Management Authority Situation Report 25/09/2022



Damages due to 2022 Rainfall and Floods

- Pakistan currently faced with unprecedented rainfall and heavy floods
 - Lives lost, displaced millions, devastated infrastructure, etc
- As per NDMA (cumulative figures till 25 Sep, 2022):
 - **Total Population Affected: 33.05 million** (mainly in Sindh and Balochistan)
 - **Deaths: 1,638** (Mainly in Sindh, Khyber Pakhtunkhwa and Balochistan)
 - **Injured: 12,865** (Higher in Sindh and Punjab)
 - **118 out of 160 districts affected (75% of the country)**
 - **Disruptions in food supplies** to people in distress; food being airlifted to many areas



The Role of Climate Change

- Climate change manifestations likely to become more pronounced in the future:
 - Pakistan contributes less than 1% of the world's carbon emissions
 - Constantly ranked among top 8 most affected countries due to climate change*
- Climate change has resulted in almost 100 km westward spatial shift in Monsoons, due to which Pakistan is expected to receive heavier rainfalls
- Extreme rainfalls and floods in 2022 a consequence of spatial shift – unprecedented phenomenon
- More than one-third of the population affected
- Severe impact on housing/shelter, health and education



**Agriculture
output
substantially
impacted**



5.2 million acres of cultivated land
(~40 percent of total) impacted
- Significant losses to cotton, dates, rice,
vegetables



Around 1.1 Million livestock
lost



23% of GDP, 38 - 40% of labor force
in agriculture affected

**Infrastructure
and personal
asset losses**



More than 13,074 km of roads;
nearly 392 bridges, and a number of
dams



More than 2.01 Million houses
damaged

**Source: National Disaster Management
Authority Situation Report 25/09/2022**

Service sector activity will also be affected



Local textile industry constitutes 25% of industrial output and more than half of goods exports
- 50% of cotton input is from domestic sources

Food processing, livestock industries

Lower agricultural and industrial activity could also affect wholesale and transportation services that make up 50 % of the services sector

External sector pressures exacerbated



Food, cotton imports will increase

Reduced shipments of agricultural output, textiles

Mitigated by remittances and international aid



**Inflation is
also spiking**



**Food shortages and
hindered transportation**

**Fiscal pressures
also likely to
worsen**



**Expenditures will increase
with relief efforts at the
Federal and Provincial levels**



**Revenues will fall with
smaller tax bases and relief
on custom duties on food**



Macroeconomic impact of the shock

Macro economy was already weakened with twin deficits, inflation above 20 percent, little external and fiscal buffers

The agricultural sector is likely to contract, first time in over 2 decades

Fiscal policy will necessarily remain expansionary to provide relief and some reconstruction

- Require international aid in form of both project and program financing over and above the existing pipeline



SINDH – Mohenjodaro



Mohenjodaro – remnants of 5,000 years old civilization and UNESCO World Heritage site has been badly hit with 740 mm rains

SINDH – DAMAGES



KHAIRPUR, SINDH



JAMSHORO



HUB RIVER BRIDGE



RAILWAY INUNDATION



INTERIOR SINDH

BALUCHISTAN – Major Communication Infrastructure

N -65



Bibi Nanak Bridge repaired and opened



Pinjra Bridge (Causeway created)

N -50



MACH RLY BR



Mughal Kot bridge repaired

BALUCHISTAN – Communication Infrastructure Damages

BOLAN RAILWAY TRACK



KHYBER PAKHTUNKHWA – Damages

PAROA



BAHRAN BAZAR



SWAT



KULACHI



SHANGLA

KHYBER PAKHTUNKHWA – Damages

BAHRAIN, SWAT



then



SWAT

Now



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PUNJAB – Damages

ROJHAN



N-70



FORT MONROE



FAZALPUR

GILGIT-BALTISTAN & AZAD JAMMU & KASHMIR

HUNZA BRIDGE



TEMPORARY BRIDGE - KOHISTAN



KAYAL BRIDGE



RESPONSE



PAKISTAN'S IMMEDIATE RESPONSE

- Government set up National Flood Response & Coordination Center (NFRCC) headed by Prime Minister for coordination mechanism
- Immediate compensation to Flood affected through Benazir Income Support Programme (BISP) –
 - initial allocation of PKR 28 Bn (approx. US\$ 126 Mn) subsequently increased to PKR 70 Bn (approx. US\$ 315 Mn);
 - *PKR 40.8 Bn (approx. US\$ 173.3 Mn) already disbursed amongst 1.63 Million families*
- Waiving off the electricity bills of all flood affected people
- Deferment of payments of Agriculture loans – *approx. PKR 52 Billion (approx. US\$ 234 Million)*
- Immediate response provided by Development Partners / NDMA/ PDMAs/ NGOs / INGOs / Civil Society Organizations
- Repurposed part of existing development portfolio for relief measures

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Source: NDMA Situation Report 25/09/2022



PRIME MINISTER DAILY VISITS TO FLOOD AFFECTED AREAS



Sindhutopur: Prime Minister Muhammad Shafiq visits flood relief camp in Sindhutopur (14 September, 2022).



INTERNATIONAL COMMUNITY'S RESPONSE



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WORSENING DISRUPTIONS AND EMERGING NEEDS



FURTHER CHALLENGES

- At least six months for flooding to recede, worrying consequences:
 - Health emergency, including water-borne diseases; rising dengue cases
 - 22,000 schools damaged, disrupting education of 3.5 M Children
 - Shelter requirements in wake of approaching winters; 1.7 Million require immediate assistance
 - Resettlement of 2 Million households
 - Threat to food security; 5.2 M acre crops destroyed
 - Rebuilding Health infrastructure; 1,946 health facilities damaged
- 650,000 vulnerable women and girls as Water, Sanitation and Hygiene (WASH) needs exacerbate over time
- Rise in Income Poverty from 7 Million to around 10 Million
- 18,000 lady health workers out of job, further threatening the immunization campaigns



WAY FORWARD



RELIEF, REHABILITATION AND RECONSTRUCTION

- **Immediate relief/ rescue**
- **Damage assessment, through involvement of international development partners**
- **Building Back Better: Redesigning, reconstruction of climate-resilient infrastructure** (communication, power, schools, medical facilities etc.)
- **Studies for long term weather effects, disaster resistant structure , water regulation, drainage systems**



POST DISASTER NEEDS ASSESSMENT (PDNA)

- Pakistan currently conducting a PDNA in collaboration with ADB, World Bank and UN agencies
- PDNA being done on the same pattern as 2005 earthquake and 2010 super floods will cover broader sectors including:

**Housing,
Health,
Education,
Irrigation and Flood Protection,
Transport and Communications,
Water Supply and Sanitation,**

**Energy,
Agriculture,
Livestock & Fisheries,
Social Protection and Livelihoods,
Governance and Environment;
etc**



Conclusions

- PDNA Report will:
 - Reveal the damage needs, and
 - provide a reconstruction and rehabilitation strategy
- Economy, already under stress, from post Covid-19 commodity shocks, hit hard by the Floods
- A difficult policy trade off to provide immediate relief & support recovery while ensuring macro-economic stability and fiscal sustainability
- Climate-resilient reconstruction will also entail heavy costs
- The recovery will need multilateral budget support, and a focused climate-resilient infrastructure development



THANK YOU

