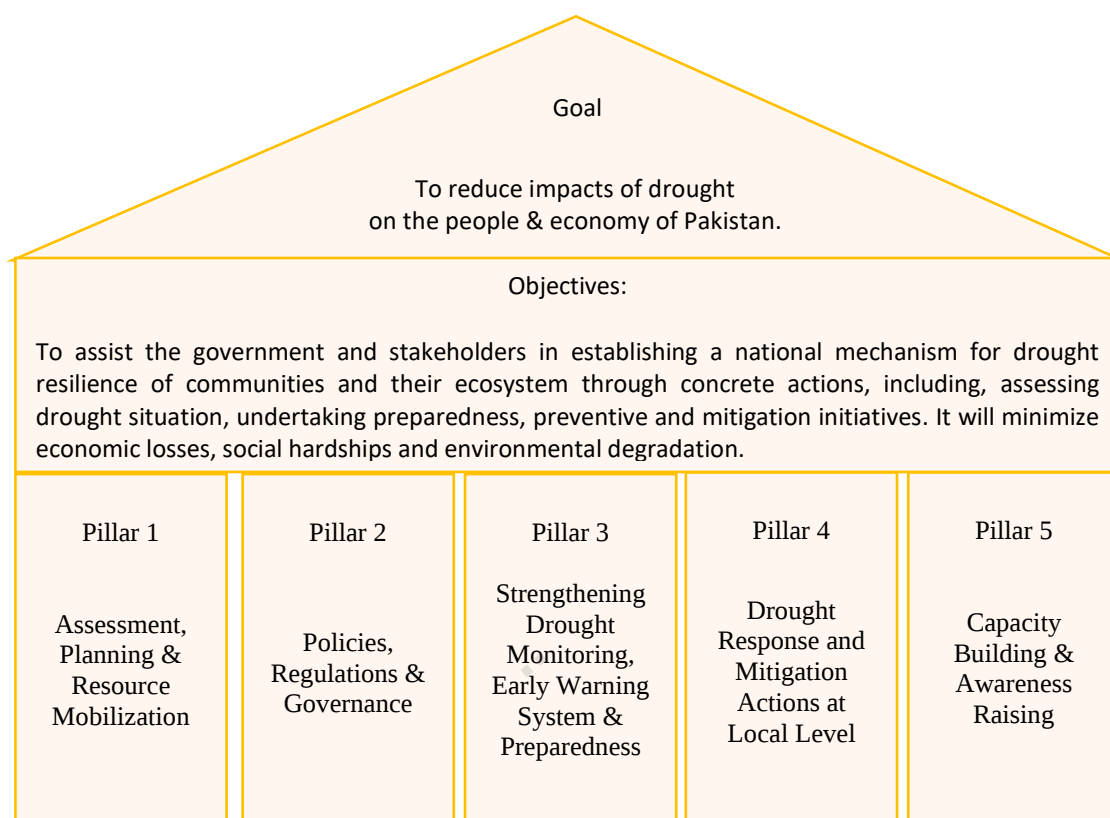




Ministry of Climate Change and Environmental Coordination

National Drought Plan-Pakistan 2025-2035



United Nations Convention to Combat Desertification (UNCCD)

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NATIONAL DROUGHT PLAN 2025-35

1. Background

Drought is a naturally occurring phenomenon that exists when precipitation has been significantly below normal recorded levels, causing serious hydrological imbalances that adversely affect land resource production systems (27). Each year, approximately 55 million people around the world are affected by drought (28). It leads to water shortage for humans and animals and causes damage to crops, livestock, and the environment. The phenomenon is slow. The shortage and erratic rainfall is its main cause. Poverty and improper use of land increase its vulnerability. Approximately 60% of deaths caused by extreme weather events are due to drought globally (28).

Drought has a major impact on food and water security, health, population displacement, migration, and socio-economic conditions. It results in increased food prices, malnutrition, poverty, unemployment, disease incidence, starvation, deforestation, loss of livestock, wildlife, and property. It reduces freshwater availability and agricultural income, increases forest fire hazard, and dust clouds, which may cause prolonged economic depression. Economic and energy security are impacted by drought. Women are the most severely affected, and gender gender-related issues increase during drought.

Pakistan has experienced 24 drought years since 1900 (Figure 1). From 1900 to 1950, drought was noted during 1902, 1920, 1931, 1935, and 1947. From 1951 to 1999, drought was noted during 1951-52, 1963-66, 1968-72, 1974, 1983-84, 1987- 88, and 1997-1999. From 2000 to 2024, drought was noted during 2004, 2006, 2018, and 2021 (20).

The drought of 1997-2002 was the worst. Its main consequences were as follows:

- It caused 25% reduction in river inflows in the Indus Basin Irrigation System (Basharat, 2016).
- Economic growth was reduced from avg. 6% in 1996-97 (29) to 2.6% in 2002.
- It reduced crop yield from 20% to 80% in Balochistan. (5).
- It destroyed almost 80 percent of fruit orchards and resulted in the loss of around 1.76 million livestock (4).
- It caused water scarcity and negative agricultural growth in Khyber Pakhtunkhwa (13). Drought from 1999 to 2002 in Sindh, caused the loss of 143 persons (14) and 2.5 million livestock (16). Drought from 1998 to 2003, caused wheat yield losses of 1.665 tons/ha, 1.114 tons/ha, and 1.028 tons/ha in Bahawalpur, Attock, and Chakwal, respectively (22).

The thirteenth Conference of Parties (2017) requested UNCCD to support countries in developing and implementing National Drought Plans. Pakistan was selected to prepare the “Drought Plan” as it indicated its interest.

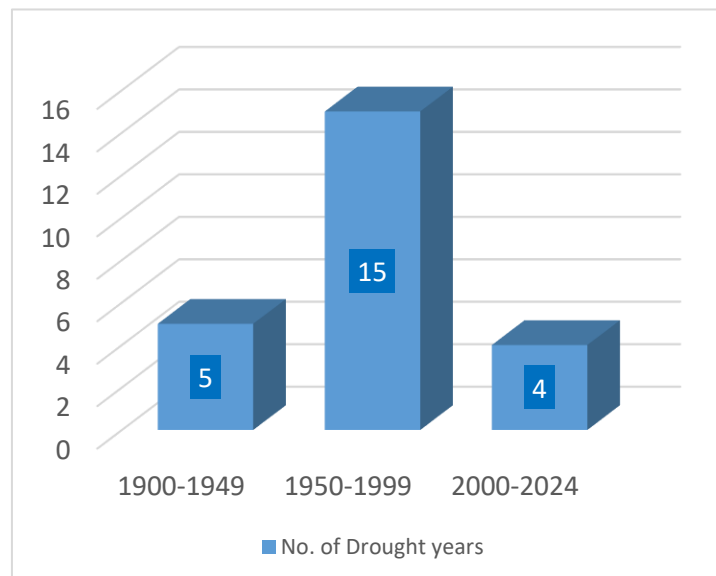


Figure 1: Number of Drought years in Pakistan, 1900-2024

1.1. Climate

According to the Climate Risk Index 2025 published by Germanwatch, Pakistan was the most affected country by extreme weather events in 2022 (1). Although the mean annual precipitation (1901-2020) (30) in the country has increased, the precipitation pattern is becoming more erratic. Monsoons with a

cycle of 4-7 years of higher and erratic precipitation followed by some equal years of low rainfall are causing increased drought events. Under the climate change scenario, the drought periods are gradually extending and becoming more severe.

Future Climatic Projections for Pakistan: It was suggested that, according to the Representative Concentration Pathway (RCP) scenarios 4.5 (RCP 4.5) and 8.5 (RCP 8.5), the mean temperature of the country is expected to be increased by 2.7°C and 8.3°C, respectively, till the end of the twenty-first century (11). Increasing summer season temperature may result in more frequent and intense droughts. An increasing trend in the frequency of dry days with precipitation of less than 1 mm per day is expected in the country (25). Intense rainfall incidents are expected to occur only in the main regions receiving monsoon rains and coastal areas in Sindh. Monsoon is expected to shift towards north-eastern areas, including the areas having glaciers, leading to increased glacier melt during the monsoon season and reduced water availability from glaciers to the country after the monsoon. The breaks in intensive wet days are expected to become longer due to the expected increase in erratic precipitation. Lower and moderate rainfall events are expected to decrease, which may lead to increased dryness and reduced soil moisture. It causes a decrease in the soil's ability to absorb excessive water during short periods of heavy rainfall.

Due to increasingly erratic rainfall, the breaks between heavy rainy days are expected to get longer. There will likely be fewer days with light or moderate rain, which could lead to drier ground conditions. As the soil becomes drier, its soil moisture will decrease, reducing its ability to absorb excessive water during heavy rainfall, especially over a short period.

1.2. Land

Pakistan's total area is 795,755 square kilometers (25). The coastline in the country is approx. 990 kilometers (14). Approximately 4.62% and 13.8% of its land area is covered by forests (17) and deserts (3), respectively. The cultivated area is 30.4% (10), including irrigated, rain-fed, and hill torrent farming. Rangelands cover about 57% of the total land area (7). Key forest cover includes temperate forests, chir forests, scrub forests, riverine, mangroves, and irrigated plantations. The country has high and snow-covered mountains of the Himalaya, Hindukush, and Karakoram in its northern areas. The melting of glaciers is the major source of water in the main rivers, including the Indus, Chenab, and Jhelum.

2. Goals and Objectives of NDP

The scope of the National Drought Plan includes identifying the most vulnerable drought-affected areas, implementing systems for early warning and drought monitoring, assessing vulnerability and risk, and taking actions to reduce drought impacts and improve response efforts. The role of women and other disadvantaged groups is reflected in the plan.

The ultimate goal of the Drought Plan is to reduce the impacts of drought on the people and the economy of Pakistan. Its objectives are to assist the government and relevant national and international stakeholders by providing a national-level mechanism for drought resilience through concrete actions. These actions include assessing the drought situation in the country, undertaking preparedness and preventive measures to help communities and ecosystems build resilience for drought, and implementing short-term, medium, and long-term mitigation initiatives. It will minimize economic losses, social hardships, and environmental degradation.

3. Plan Development Process

The plan was circulated among the federal and provincial stakeholders, and comments received were incorporated into the plan. Provincial consultative meetings were held with the four provinces, Gilgit Baltistan, and Azad Jammu and Kashmir (AJK) from 22 February 2022 to 15 August 2022. These meetings were chaired by Planning and Development departments of relevant provinces/states. Comments on the plan were received from the Ministry of Water Resources, Federal Flood Commission, Pakistan Agricultural Research Council, Pakistan Meteorological Department, Provincial Forest, Agriculture, Agriculture Engineering, On-farm Water Management, Agriculture Research, Irrigation, Provincial Disaster Management Authorities (PDMAs), Environmental Protection Agencies (EPAs) etc.

4. Alignment with Policies and international obligations

The national drought plan is aligned with the objectives of the National Water Policy 2018, which emphasizes the preparation of Drought Management Plans. Moreover, it is consistent with the National Climate Change Policy 2021, National Adaptation Plan 2023, and National Water Conservation Strategy 2023-27. The drought has been addressed in strategies and policies, including Pakistan Vision 2025, National Disaster Risk Reduction Policy 2013, National Food Security Policy 2018, National Drinking Water Policy 2009, and National Forest Policy 2017, contributing to comprehensive country-wide efforts for drought risk reduction.

Drought-related issues have been addressed in legal frameworks such as the National Disaster Management Act 2010 and relevant provincial policies, guidelines, and Standard Operating Procedures. Additionally, drought management is integrated into Pakistan's international commitments, including the Sustainable Development Goals (SDGs), the UNCCD's Land Degradation Neutrality (LDN) initiative, and the Aichi Biodiversity Targets.

5. Main causes of drought

Until the 1950s, Pakistan was a water-abundant country with sufficient food resources cultivated along its agricultural belt. However, it is now considered a water-scarce country, with per capita water availability falling below 1,000 cubic meters (12). Groundwater supplies approx. 70% of domestic water and over 50% of agricultural water nationally (30).

The major causes of drought include rising temperatures, the El Niño effect, climate change, erratic rainfall, and inefficient water use. Out of 21 drought years recorded between 1871 to 1988, 11 coincided with El Niño phase of the Southern Oscillations (ENSO), which negatively impacted monsoon patterns and directly contributed to drought conditions (20). Rising temperatures and the shifting of monsoon towards dry temperate areas may accelerate glacier melting, but over time, it will reduce river flows and exacerbate water shortages.

6. Organizations dealing with drought

The major federal government organizations dealing with drought include the following:

- Ministry of Climate Change and Environmental Coordination (MoCCEC),
- National Disaster Management Authority (NDMA),
- Ministry of Water Resources,
- Ministry of National Food Security and Research,
- Pakistan Agriculture Research Council,
- Global Change Impacts Study Center (GCISC),
- Water and Power Development Authority and
- National Disaster Risk Management Fund, and
- Pakistan Meteorological Department (PMD).

The PMD has established the National Drought Monitoring and Early Warning Centre (NDMC), along with four Regional Drought Monitoring Centers (RDMCs). PMD's National Agro-met Center links meteorological information with the agriculture sector. Based on the reliance on weather data for climate change monitoring and the experiences of many countries, it is proposed that an institutional linkage may be established between PMD and MoCCEC.

The main provincial departments working on drought include Forest, Irrigation, Agriculture, Water Management, Provincial Disaster Management Authority, Local government and research institutes.

In addition to several NGOs, Rural Support Programs, and micro-finance banks, United Nations agencies including UNDP, UNICEF, FAO, and WFP cover drought in their programs.

7. Drought monitoring and forecasting

Drought monitoring and forecasting play a crucial role in drought risk reduction. Drought-related hydro-meteorological and other relevant indices and indicators are recorded and reported by PMD

and Water and Power Development Authority (WAPDA). The GCISC also conducts data analysis, which supports decision-making at the government and community levels.

The PMD monitors and forecasts drought through its network of meteorological and flow gauge stations. Most of the information is made available on its website. NDMA disseminates such data to the general public through mobile messaging and electronic media. Drought forecasting provides lead time for government decision-makers and local communities to plan and implement mitigation strategies. NDMA has conducted disaster risk and vulnerability assessment studies; which include drought risks.

Drought-prone areas: The research based on data from 1951-2010 exhibits that drought frequency has increased in the country. Due to rising temperatures and increased frequency of droughts, crop water requirements have increased. Based on PMD analysis, 25 districts of Pakistan are extremely vulnerable to drought ([Figure 2](#)).

Probable Drought-prone Areas in Balochistan: Most of the extremely high-hazard districts in the country are situated in Balochistan ([Figure 2](#)). Extremely high hazard districts in the province include Chagai, Washuk, Kharan, Noshki, Kalat, Shaheed Sikandarabad, Kech, Quetta, Killa Abdullah, Pishin, Chaman, Lehri, Ziarat, Suhbatpur, Jaffarabad, Usta Muhammad, Dera Bugti, Gawadar, Lasbella, and Hub. In northern areas of the province, early to late winter droughts have been observed with extreme, severe, and moderate droughts returning after 35-55 years, 16-21 years, and approx. 7 years, respectively. In the eastern areas, early summer extreme, severe, and moderate droughts with return periods of approx. 60, 20, and 8 years, respectively, were noted. In the northeast, late summer extreme, severe, and moderate droughts with 65, 21, and 8 years return periods were recorded.

Probable Drought-prone Areas in Sindh: Tharparkar has an extremely high vulnerability index followed by Umerkot, Mirpur khas, Badin, Thatha, Tando Muhammad Khan, Tando Allah Yar, Sangher, Shaheed Benazirabad, and Dadu, which possess high vulnerability index (Adnan et al., 2015). Other drought-prone areas include Kohistan, Sukkar and Khairpur districts.

Probable Drought-prone Areas in Punjab: Rahim Yar Khan, Bahawalpur, and Lodhran are extremely high-hazard districts. Other drought-prone districts include Bhawalnagar, Layyah, Multan, Muzafargarh, Vehari, Khanewal, Toba Tek Singh, Kot Addu, and Pakpattan.

Probable Drought-prone Areas in Khyber Pakhtunkhwa, Gilgit-Baltistan and AJK: Laki Marwat and D. I. Khan are highly vulnerable districts in KP. However, among other area extreme drought was recorded in Chitral and Dir in 1971, in Cherate in 1984, and in Dir, Drosh, Chitral and Kakul in 2001 (Rahman, 2018). Gilgit-Baltistan and AJK do not contain extremely high or highly vulnerable areas.

8. Drought Mitigation and Preparedness at National Level

Drought mitigation measures help restore ecological balance, adapt to and mitigate climate change, and bring sustainable development benefits to the local communities. However, such programs and projects may not be stand-alone interventions but should be part of developmental and budgetary planning in the domain of natural resource management, watershed management, and sustainable forest management. Such measures need to be mainstreamed in regular development programs at federal, provincial governments, and local levels.

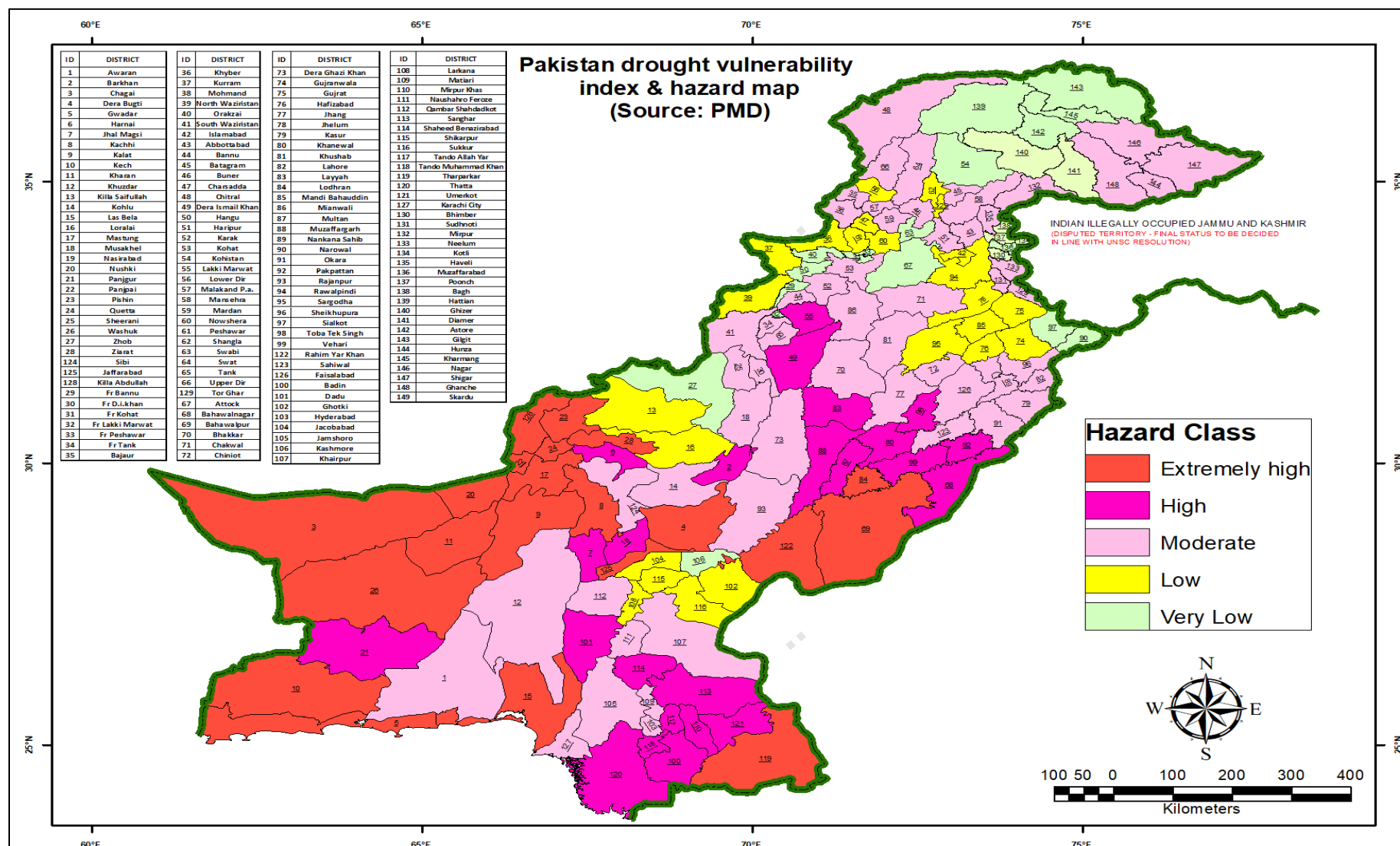


Figure 2: Drought Vulnerability Index and Hazard map of Pakistan (PMD, 2023)

9. Federal and Provincial Governments' Expenditures for projects related to drought and desertification 2014-2024

From July 2014 to June 2024, a total of 986 billion rupees were spent on projects related to drought and desertification under the Federal PSDP. Of this amount, 237.4 billion rupees were spent from July 2014 to June 2019 and 748.6 billion rupees were spent between July 2019 and June 2024 under the Federal PSDP (Figure 3). Additionally, provincial governments spent a total of 592.6 billion rupees on such projects under their respective Provincial ADPs. This includes 201.1 billion rupees spent from July 2014 to June 2019 and 391.5 billion rupees spent between July 2019 and June 2024.

The total amount spent on such projects by federal and provincial governments under their respective PSDP or Provincial ADPs from 2014 to 2024 was 1,578.6 billion rupees. The amounts spent by Punjab, Sindh, KP, Balochistan, Gilgit Baltistan, and AJK during this period were PKR. 181.4 billion, 155.6 billion, 123.6 billion, 113.3 billion, 4.8 billion and 16.4 billion, respectively (Figure 4).

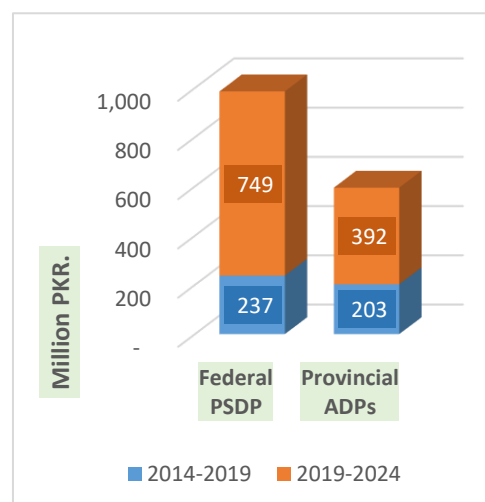


Figure 3: Federal and Provincial Govt. spending on Drought & Desertification

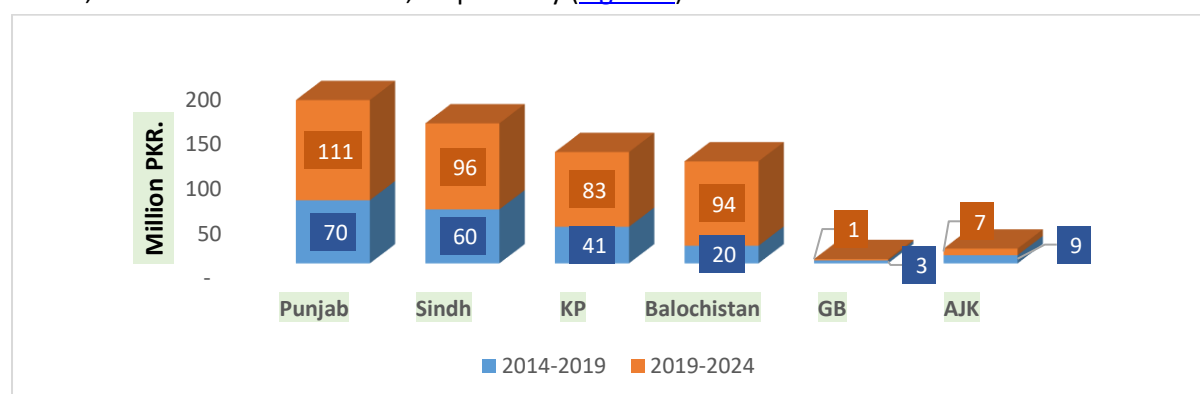


Figure 4: Provincial Governments' spending on drought & desertification

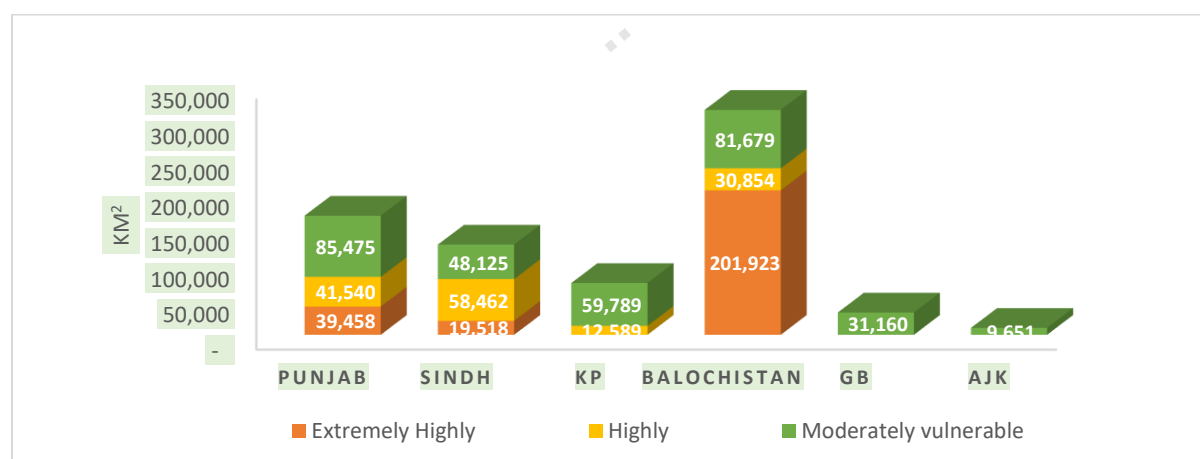


Figure 5: Provincial Areas Vulnerable to Drought (sq. km)

10. Gaps in Drought Management

Drought management in Pakistan faces several challenges across planning, preparedness, implementation, and monitoring. Identifying these gaps is crucial to improving the overall efficacy of drought management strategies. Key gaps include the absence of drought management in planning and budgetary processes, weak policy and institutional coordination mechanisms, weak regulatory frameworks, limited capacity in drought monitoring, preparedness, and early warning, limited water storage and water management in drought-prone areas, limited awareness and capacity of stakeholders and socio-economic vulnerabilities.

11. Priority Recommendations and Implementation Actions at National level

The priority actions and recommendations for drought risk reduction, readiness, response, and recovery of the drought-affected areas and communities include:

- mainstreaming drought into planning and budgetary processes,
- formulating national land use and drought management policies,
- improving institutional and coordination mechanisms. Based on the reliance on weather data for climate change monitoring and the experiences of many countries, it is proposed that an institutional linkage may be established between PMD and MoCCEC.
- improving groundwater regulation and management in drought-prone areas,
- strengthening drought forecast and early warning systems, drought emergency response preparedness, water resource development and management in drought-prone areas, watershed management, sustainable management of forests, cropland and rangelands,
- capacity building, and awareness-raising.

12. Action Plan for Drought Management at National level

The proposed actions for drought mitigation and adaptation at the national level includes short term (up to 5 yrs.), medium (5-10 yrs.) and long term (>10 yrs.), as follows:

#	Action	Lead Agency	Support Agency	Timeline	Tentative budget (Mil. PKR)
Pillar 1. Drought Assessment, Planning and Resource Mobilization					
1.	Develop and disseminate national, regional, and local drought preparedness/ management plans.	MoCC&EC	NDMA, Provincial P&DDs, PDMA	Short-term	300
2.	Develop concept notes/ PC-1s/ Project documents on drought	PARC, Provincial P&D, Forest, Agriculture and Irrigation Departments (Depts.)	MoCC&EC	Short to Medium-term	1,000
3.	Develop and incorporate disaster-related indicators in the planning documents (PC-1s)	M/o Planning	Provincial P&DDs	Short-term	200
4.	Map groundwater resources of drought-prone areas	Provincial Irrigation Dept.	M/o Planning, Dev., PCRWR	Short-term	800
5.	Update drought vulnerability index and hazard map of Pakistan	NDMA, PDMA	PMD, GCISC, NDRMF	Short-term	260
6.	Develop MIS/ Decision Support System for drought	MoCC&EC and PMD	PARC, Provincial P&DDs	Medium-term	200

Pillar 2: Policies, Regulations and Governance					
7.	Develop a national land use policy of drought-prone areas	PARC	NDMA, Provincial Agricultural Depts.	Short-term	100
8.	Develop National Drought Management Policy and guidelines and mainstream drought mitigation in existing policy documents	MoCC&EC	NDMA, PDMA, Provincial P&D Depts.	Short-term	150
9.	Establish Director General office for desertification/ drought mitigation	MoCC&EC	-	Short to Medium-term	200
10.	Improve regulations for groundwater usage and management in drought-prone areas	M/o Water	PARC, Provincial Irrigation and agriculture Depts. PCRWR.	Short-term	150
Pillar 3: Strengthening the Drought Monitoring, Early Warning System and Preparedness					
11.	Strengthen National Drought Monitoring and Early Warning Centre and systems to forecast the early warning for drought	PMD/ NDM&ERC	NDMA/ NIDM	Medium-term	5,000
12.	Strengthen community-based early warning dissemination systems for drought	PMD	Provincial Planning & Development Depts. NGOs	Medium-term	2,000
13.	Re-investigate agro-climatic zones and crop calendars in line with climate change projections	PARC, PMD	Prov. Agricultural Research Centres, Provincial Crop Reporting Services	Short-term	100
14.	Reinvestigate livestock vaccination calendars in line with climate change projections	Provincial Livestock Depts.	NGOs, IGOs	Short-term	100
15.	Research water resources management, benchmarking of existing on-farm soil and water conservation practices	PARC	Provincial Irrigation and OFWM depts. PCRWR. Indus River System Authority	Medium-term	240
16.	Research drought-tolerant livestock breeds	Provincial Livestock Research Institutes	PARC	Long-term	2,000
Pillar 4: Drought Response and Mitigation Actions at Local Level					
17.	Piloting efficient irrigation and moisture-absorbent technologies for arid agriculture.	PARC Prov. Irrigation and Agriculture Depts.	OFWM, Prov. Research Centres, NGOs, IGOs	Long term	5,000
18.	Command area development of small reservoirs and dug wells for arid horticulture	PARC	OFWM, Extension Depts., Prov. Research Centres	Long term	5,000
19.	Watershed management program to improve the health of catchments by controlling erosion	Communities, NGOs, Forest Department	NGOs, IGOs	Long term	6,000
20.	Construct 100 check dams to reduce soil erosion	Provincial Forest and Agriculture Depts.	NGOs, IGOs	Medium-term	6,000

21.	Demonstrate Hill Torrents Flood Management to mitigate adverse impacts of droughts in DG Khan, DI Khan & Kirthar mountain range	Prov. Irrigation Depts., NGOs, IGOs	PARC, Prov. Research Centres, Prov. Forest and Agriculture Depts.	Long term	4,000
22.	Lined cementation of water courses for irrigation in drought-prone areas	Provincial Irrigation and Agriculture Depts.	NGOs, IGOs	Long-term	10,000
23.	Conduct feasibilities and construct 400 lined surface and underground ponds and mini-dams in drought-prone areas	Provincial Irrigation and Forest Depts.	NGOs, MOCC&EC	Long-term	48,000
24.	Excavation, lining & cleaning of karezes	Balochistan Irrigation Depts.	NGOs, IGOs	Long-term	600
25.	Development of indigenous small water reservoirs for rainwater harvesting (Tankas)	Sindh Irrigation and Forest Depts.	TRDP, Baanh Beli, SCOPE NGOs	Short-term	1,200
26.	Excavation of open surface wells in drought-prone areas	Provincial Irrigation Depts.	NGOs, IGOs	Short-term	1,000
27.	Demonstrate low delta crops and water-saving cropping practices to local communities	Provincial Agriculture Dept.	PARC	Medium-term	10,000
28.	Promote community-managed integrated rangeland management	Provincial Forest and Wildlife Dept.	PARC	Medium-term	50,000
29.	Establish seed banks of local and improved grasses and shrubs at divisional/district level		NGOs, IGOs	Long-term	1,000
30.	Develop animal watering points in range and pasture lands	Provincial Forest Depts.	NGOs, IGOs	Short-term	2,000
31.	Establish nurseries of mazri and bamboo crops in dry areas	Provincial Forest Depts.	NGOs, IGOs	Medium-term	300
32.	Indigenous forest tree plantations	Provincial Forest and Wildlife Dept.,	MOCC&EC, NGOs/IGOs	short-term	102,460
33.	Strengthen land use management and control deforestation	Provincial Forest and Wildlife Depts., CDA	Prov. Forest Dept., NGOs/IGOs	Long-term	10,000
34.	Develop nurseries of indigenous low delta forest trees' species	Provincial Forest Depts.	NGOs/IGOs, MoCC&EC	short-term	7,300
35.	Protect forests by promoting LPG, natural gas, micro-hydel, solar energy and fuel-efficient stoves	Provincial Forest and Power Dept.	Private LPG companies, NGOs	Long-term	500
36.	Promote preventive measures for animal diseases, Veterinary health services and improved livestock breeds by training community activists.	Provincial Livestock Dept.	NGOs/IGOs	Medium-term	2,000

37.	Improve fodder like hay and silage making	Livestock Dept.	NGOs/IGOs	Medium-Term	200
38.	Promote off-farm employment opportunities as alternate income source to protect natural resources for women	Provincial Agricultural. & Forest Depts.	NGOs/IGOs	Long-term	2,000
39.	Control locust growth by environment friendly means, integrated pest management	Provincial Agriculture and Plant Protection Depts.	National Locust Control Centre, PMD, PARC	Long-term	16,000
40.	Achieving targets of Land Degradation Neutrality in Pakistan	Provincial Forest and Agriculture Depts.	MoCC&EC	Long-term	1,300
41.	Take drought preparedness and response actions	PDMA	NDMA	Long-term	15,000
Pillar 5: Capacity Building and Awareness Raising					
42.	Training of professional (line departments, NGOs) service providers and farmers on efficient irrigation, water harvesting, moisture conservation, drought-resilient agriculture, rangeland, solar desalinization etc.	PARC/ National Institute of Disaster Management	OFWM, Extension Depts., Prov. Research Centres, NGOs, Development sectors	Short-term	3000
43.	Awareness meetings, workshops, and field demonstrations for farmers on water-saving, drought-resistant agricultural practices and drought mitigation	Provincial Agriculture Depts., Forest Depts., PMD	PARC, NGOs	Short-term	5,000
44.	Local and foreign training workshops and exchange visits for staff of government and NGOs on drought mitigation	MOCC&EC	Provincial Forest, Agriculture, Irrigation, Wildlife, P&DDs, NGOs	Long-term	15,000
45.	Use media and tele-communication companies for awareness on drought and develop website on drought in Pakistan	Directorate of Drought, MoCC&EC, PMD	-	Medium-term	12,000
46.	Incorporate drought and water conservation education into school curricula.	Education Department, Higher Education Commission	PMD, PCRWR, NGOs and MoCC&EC	Medium-term	1,000
47.	Organize workshops and campaigns for students about importance of water resources and sustainable practices				
48.	Research on water harvesting for drought-prone areas	PCRWR	-	2026- 32	700
49.	Research on low delta crops and agronomic techniques, participatory rangeland	AZRI ¹ Umer kot & Bhawalpur, BARC ² Quetta,	PARC	2024-30	1,000

¹ Arid Zone Research Institute² Balochistan Agri. Research Center

	development and sand dunes stabilization in drought prone areas	Sindh and Balochistan, Forest depts, Forest Research Institute Faisalabad			
50.	Research on animal diseases, prevention, fodder and feed supplements in drought-prone areas	AZRI Umer kot & Bhawalpur, BARC Quetta	PARC	2026- 30	500
51.	Research on honeybee keeping for dry areas	AZRI Umer kot & Bhawalpur, BARC Quetta	PARC	2029- 35	200
52.	Feasibility of drip irrigation for crops and grafted ber, pitcher plantation on farmers' fields			2028- 32	400
53.	Improve integrated land use for rangelands/ pastures in drought-prone areas			2028- 34	300
54.	Research on medicinal plants in dry areas requiring low inputs			2027- 33	300
55.	Research on drought mitigation possibilities using snow and ice reserves and routing schemes	PMD	PCRWR, GCISC, WAPDA, PARC	2025- 29	60
56.	Research on drought impacts over seasonal crops and water resources; climate extremes like torrential rain, heat and cold waves on diseases in drought-vulnerable regions, their association, and future projections	PMD	PCRWR, GCISC, WAPDA, PARC, Prov. Agricultural Depts., Prov. Health Depts.	2025- 29	180
57.	Establish/ strengthen research facilities like nurseries, tissue culture, and biotechnology to develop drought-resistant grasses, crops, and trees	NARC	PARC	2024-28	1,000
58.	Research on Locust attack and control measures	Department of Plant Protection MoNFS&R	Provincial Agriculture Depts. of Punjab, Sindh & Balochistan	2025-29	500
59.	Research on flash, seasonal, and conventional (annual) drought onset, propagation, and impact	AZRI Umer kot & Bhawalpur, BARC Quetta	PARC	2025-29	400
Total					361,200

The total budget planned for federal and provincial governments for monitoring, forecasting, and mitigation of drought is 4,548 billion rupees. The federal and provincial governments' planned contributions to this plan are described below ([Figure 6](#)). The plan will be revised after five years.

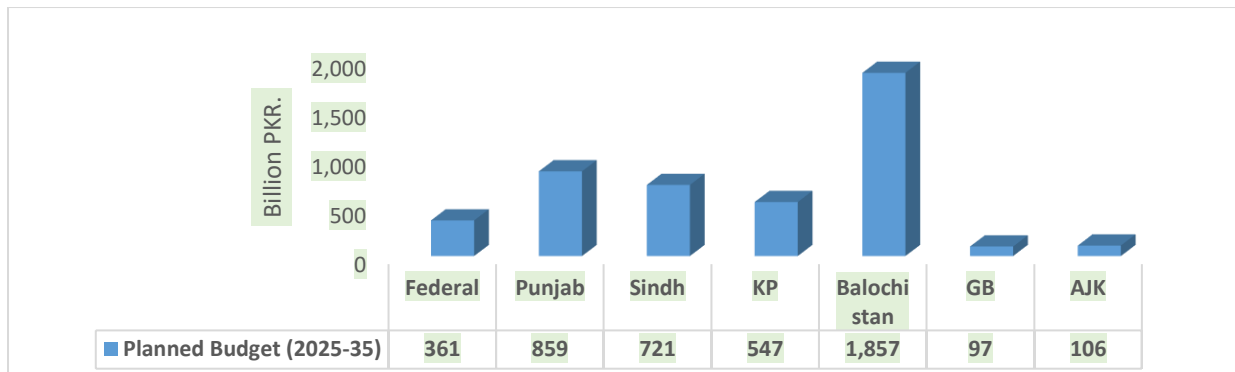


Figure 6: Budget planned from 2025 to 2035 under National Drought Plan

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