

# Resilient Pakistan newsletter

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Way more than a spice – Saffron symbolizes beauty, color, sense of sacrifice and prosperity. Its radiant colors and exquisite flavor have earned it a reputation of royalty use and a high value trade commodity. Traditionally grown in Iran, Kashmir, Bhutan and few other areas around the world, it has now been successfully cultivated in Pakistan through joint efforts of NDRMF, Government of KPK and World Bank.



## COVER STORY

Promoting Agriculture with New Perspective

## GOLDEN CROP- SAFFRON

Crocus sativus commonly known as "Saffron / Zaffron" often referred to as "Red Gold" is highly prized "spice" known for its vibrant color and unique flavor with a wide range of medicinal and nutritional values.

Saffron is an annual medicinal flowering (perennial) herb derived from the flower of Crocus sativus and the stigma is used as an edible spice with medicinal history from traditional healing to modern health care.



## HEALTH BENEFITS



Antioxidant Boost



Weight Loss



Antidepressant



Promote Libid

Prevent Nervous  
System DisorderCancer Fighting  
PropertiesReduce Heart  
Disease Risk FactorsLower Blood  
Sugar Levels

## Saffron Cultivation

Mainly grown in Iran, India, Spain, Greece, Italy, Pakistan, Morocco and Central Asian Countries. In Pakistan, Saffron can be best grown on clay-calcareous soil with high organic content. Traditional raised beds provide good growth medium for Saffron cultivation. Saffron is typically grown by planting corms having weights of 10g to 20g in the month of September / October on sunny well drain soil. The crop matures in 70 to 90 days and the flowers once started are regularly collected. Later, stigma is separated from flowers and shade dried. One corm of Saffron above 09g can produce 03 to 05 flowers per plant. At least 01 to 02 Kg of Saffron dried threads (Stigma) can be obtained from one-acre area. Saffron can fetch 03 to 05 Lac PKR per Kg or even higher price premium quality Saffron, depending on quality and market demand. A labor-intensive intervention but create job opportunities for the rural poor and high value product. Dry Saffron stigmas can value Rs. 10,000/- per Tola with additional production of substantial quantity of about 0.100 million bulbs per acre each bulb valuing Rs. 250/-.

## Restoration of Degraded Lands-Shift Toward Climate Smart Horticultural Production

In Pakistan Saffron can be cultivated in dry temperate ecological Forest zones of Khyber Pakhtunkhwa like Chitral, Dir, South Waziristan, Khyber and upper regions of Swat and Baluchistan on sunny locations and well-drained soil. The Climate Resilience through Horticulture Intervention in Khyber Pakhtunkhwa (KP) was devised by the Agriculture Department, Government of KP in association with Climate Change, Forest, Environment and Wildlife Department with financial support of the **World Bank** through National Disaster Risk Management Fund (NDRMF). The main objective of the project was to contribute to climate resilience through introduction of Saffron cultivation for efficient utilization of potential arable and cultivable waste land and diversification of livelihood opportunities by establishing demonstration plots of Saffron as one of the major interventions for high value product, creating value chain, diversification of livelihood opportunities by establishing demonstration Saffron plots in project target areas. These plots are raised on experimental basis in South Waziristan and Khyber tribal districts and results are successful.

### Establishment of Demonstration Plot of Saffron & Subsequent Maintenance

Under the project, demonstration plots of Saffron were established on private arable land of progressive farmers over an area of 23 acres and its subsequent maintenance for one year during the project period.

Several key steps are involved in Saffron demonstration plots that are usually required for ensuring the optimal growth and desired yield. Farmers are supported for their labor works required for preparation of land and fertilizers from the project cost and through generation of green jobs. Similarly, Saffron corms were distributed among the farmers free of cost. Saffron is a delicate and high value spice, cultivated in dry temperate environment as specific conditions and following steps are involved for plot preparation:

#### 1. Site Selection

Saffron cultivation was planned for the potential dry temperate zones in the province of KP on available arable and waste lands of communities to convert such types of land in cultivation and help improve the socio-economic condition of locals. Similarly, other crops yields have been significantly decreased due to climate change impacts and farmers are facing financial losses. In order to overcome such challenges, existing cultivable lands were selected as alternate source of income and combat climate change. Moreover, Saffron cannot be cultivated in all types of soil. It grows well in sandy-loam or clay-loam soil with proper drainage to prevent waterlogging effects. Site shall not be covered with vegetation and shall receive full sunlight for most of the day. As per standard practices of the department, farmers with the lands available (both arable/waste and cultivable) were invited to participate in the project. Sites and farmers were selected through predefined selection criteria in the project proposal and was based on certain technical feasibility assessments

including the environmental and social safeguards aspects. The target of Saffron cultivation was distributed in various zones to pilot the activity and demonstrate the outcomes for future planning and extension. Department has signed MoUs with the potential farmers for protection and maintenance of the Saffron plots.





## 2. Leveling of Land/Preparation

Selected sites with required lands were leveled and prepared in furrow type irrigation formation to ensure proper drainage. Land preparation cost was paid to the farmers by the department as it was allocated in the project overall cost to reduce the burden on locals and generate income opportunities.

## 3. Planting Material

In order to get the desired success rate in germination, quality of Saffron corms must be sourced from reputable supplier. It shall be ensured that corms are disease-free and of a suitable size (usually 2 to 4 cm in diameter). For this purpose, department procured healthy and good quality of corms and supplied to the selected farmers.

## 4. Planting of Saffron Corms

Generally, Saffron are cultivated in late spring or early summer with requirements of about 10 to 15 cm deep with spacing of 10 to 15 cm between the corms. Cultivation requires skills to place corms with the pointed side up to germinate. Proper mulching of soil is required to retain moisture.

## Harvesting of Saffron

Propagation of Saffron is carried out with the help of its bulb. A Saffron bulb during a growing season reproduces up to 5 - 10 bulbs vegetative which can further grow into new plants in the next season. Planting of bulbs is mostly carried out in September / October on sunny and well-drained sites. A Corm up to 9 gram produces 3 to 5 flowers per plant yielding up to 2.5 Kg dry stigmas per acre. Collection of 1 kilogram of dry stigma requires picking stigmas of 150000 flowers with 40 hours' of manual labor.

**Saffron is generally grown by planting corms in the month of September and October on sunny well drain soil and matures in 70-90 days, the flowers once started are regularly collected and stigma is separated carefully from the flower and shed dried.**

## 1. Provision of Saffron Bulb

Saffron bulbs were distributed among the selected farmers from the zonal offices of NTFP section of forest department free of cost. Sites were prepared in the form of furrow land which helps distribute the irrigation water equally and protect the bulb from damage due to excessive water. Cultivation was supervised by the technical teams of the respective zones.

## 2. Harvesting

Saffron flowers usually bloom in fall and the bright red part known as "stigma" or simple words Saffron threads are carefully plucked in the morning when the flowers have fully developed and opened.

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Cultivation of Saffron will bring new vistas of development for the rural communities of the project area. The establishment and maintenance of demonstration plots will disseminate technical know-how and hands-on training to the farmers' community for emulation and further replication to promote Saffron cultivation in the province.



## Cultivation Targets & Expected Results

Saffron has been cultivated on 23 acres of land across the province with planting of 496,800 bulbs, zone wise detail for the target in acres and bulb is mentioned in the table below. Saffron production varies from site to site and low in first flowering season and upon maturity Saffron production can reach at least one to two kilograms from one acre of land.

Distribution Plan of Saffron Bulb/Corm in Khyber Pakhtunkhwa

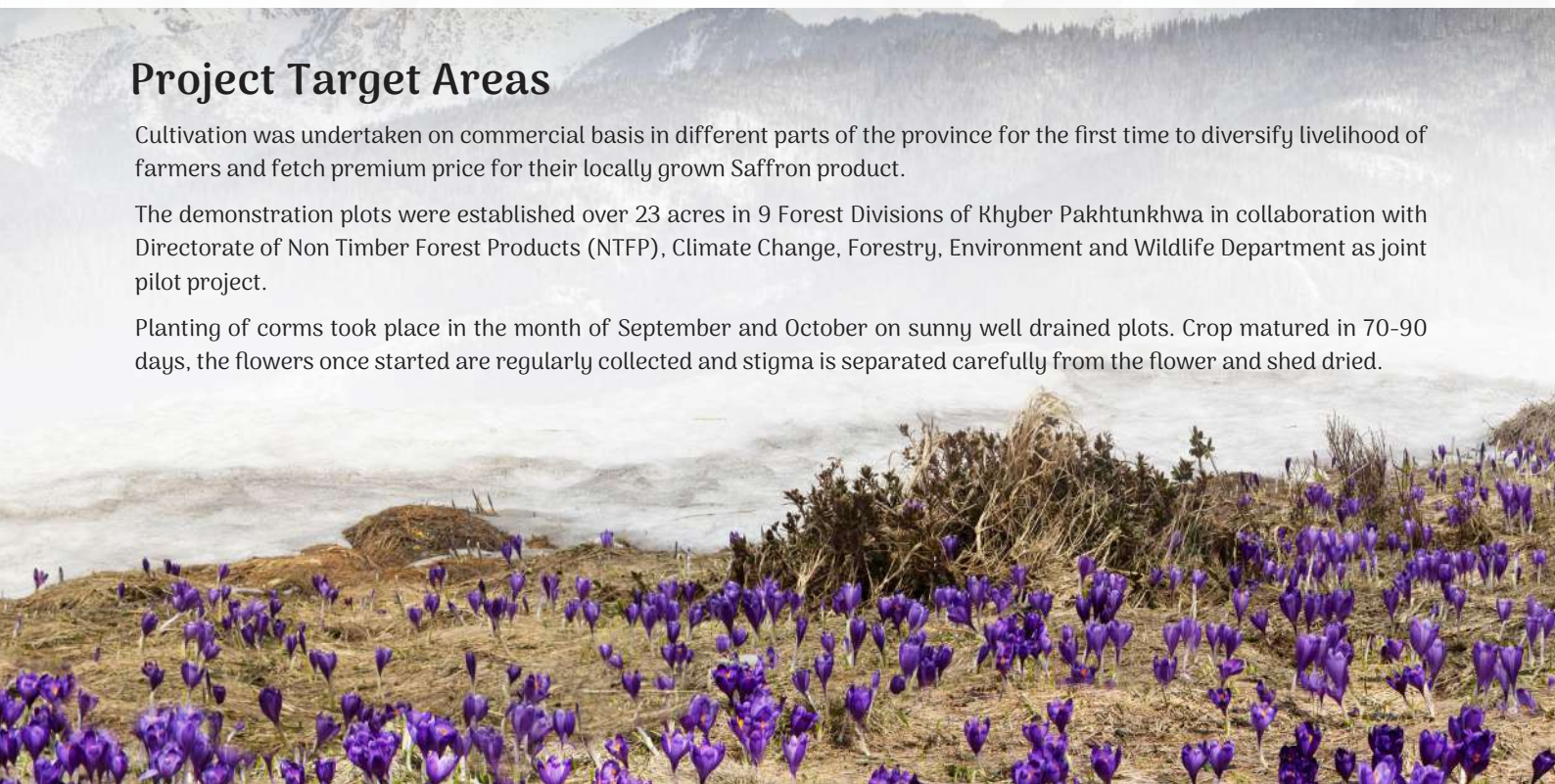
Forest Division <b>Chitral</b> Bulbs (Numbers) <b>64,800</b> Acre <b>03</b>	Forest Division <b>Dir</b> (Lower / Upper) Bulbs (Numbers) <b>43,200</b> Acre <b>02</b>	Forest Division <b>Kalam</b> Bulbs (Numbers) <b>43,200</b> Acre <b>02</b>	Forest Division <b>Swat</b> (Lower / Upper) Bulbs (Numbers) <b>21,600</b> Acre <b>01</b>	Forest Division <b>South Waziristan</b> Bulbs (Numbers) <b>129,600</b> Acre <b>06</b>
Forest Division <b>Bajaur</b> Bulbs (Numbers) <b>43,200</b> Acre <b>02</b>	Forest Division <b>Khyber</b> Bulbs (Numbers) <b>64,800</b> Acre <b>03</b>	Forest Division <b>Orakzai</b> Bulbs (Numbers) <b>43,200</b> Acre <b>02</b>	Forest Division <b>Kurram</b> Bulbs (Numbers) <b>43,200</b> Acre <b>02</b>	

## Project Target Areas

Cultivation was undertaken on commercial basis in different parts of the province for the first time to diversify livelihood of farmers and fetch premium price for their locally grown Saffron product.

The demonstration plots were established over 23 acres in 9 Forest Divisions of Khyber Pakhtunkhwa in collaboration with Directorate of Non Timber Forest Products (NTFP), Climate Change, Forestry, Environment and Wildlife Department as joint pilot project.

Planting of corms took place in the month of September and October on sunny well drained plots. Crop matured in 70-90 days, the flowers once started are regularly collected and stigma is separated carefully from the flower and shed dried.



## Capacity Building of Community & Staff

### Technical Assistance

Saffron cultivation requires technical knowledge and skills for achieving the desired yields. Requisite funds have been allocated under the project for the Community Development Extension Gender & Development (CDE & GAD) directorate to undertake mobilization of existing village development committees (VDCs) and women organizations (WOs) for promoting Saffron cultivation in the project areas.

Trainings were conducted for communities, farmers and forest staff through I&HRD Directorate of Forest Department extended their role through capacity building sessions with the selected farmers. These sessions were participatory in nature where farmer's indigenous knowledge and experiences were coupled with latest techniques keeping in view the climate change aspects. These sessions not only oriented the local farmers on the land preparation, cultivation but also on climate change impacts and coping techniques for crops. Participants were briefed on the biological methods to deal with pests and avoiding the hazardous chemicals along with promoting preparation and use natural fertilizers.

The most important step is to manage the post-harvest damages of Saffron products and farmers were oriented and trained on such techniques of collection of stigma (known as Saffron), drying, grading, packing and accessing the high value markets.

## Transforming Landscapes, Empowering Local Farmers, Fostering Sustainability

### Project Highlights:



## Cultivating a Greener Nature Simple-Organic-Healthy

The project is expected to considerably increase the yield of major horticultural commodities and will have not only positive impact on the climate but export commodities will be enhanced. Resultantly this will have direct positive impact on farmers' income and their living standard will be improved which will further lead to upscale their socio-economic condition.

Saffron price in market varies from Rs 300,000 to Rs 500,000 per kilogram and at least one to two kilograms dried threads (stigma) can be obtained from one acre of land. Due to high demand and price value Saffron cultivation can help boost the economy of the country through better sources of income and job creation.

NDRMF intends to create income generating opportunities in the target areas/communities to utilize the arable and waste-lands for Saffron cultivation and reduce the pressure on local ecological services for their domestic needs and ensure conservation. This pilot phase project of Saffron cultivation has been a resounding success as the first crop has started yield and will be extended to other areas for larger public interest and conservation of local environment and ecosystem. NDRMF is now engaged with stakeholders to scaleup the project by increasing the arable land.



## Managing Risks in Phase II – A unique blend of Reconstruction, Rehabilitation & System Strengthening

Building further on the lessons learnt from phase I – Disaster Risk Reduction Projects across Pakistan, NDRMF's continued its journey towards making Pakistan resilient. In the emerging context of climate induced disasters, Phase II while promoting a sense of safety and security among 74,658,871 beneficiaries, NDRMF has taken on the task of Reconstruction & Rehabilitation (R&R) and system strengthening portfolio worth PKR 10.379 Billion (USD 37.14 million) in the most vulnerable districts across Pakistan. In the perspective of Mega floods 2022, need for rehabilitation & reconstruction is imperative with view to protect and safeguard communities from further looming hazards.

In Phase II, under R&R portfolio, 81.47 KMs flood mitigation reconstruction work is under progress on the sites that had witnessed heavy floods in Monsoon 2022 and were damaged while combating with the gushing floods. In addition to saving the pentagon of assets of the people, critical installments and infrastructure (government and non-government) and valuable innovative investments, the project is also contributing towards mitigation of climate induced impacts by protecting 103,416.34 Hectares of agricultural land, 51,909.69 Hectares of non-agriculture land and 43.22 Hectares of forest.

Apart from brick and mortar, Phase II is also investing in strengthening early warning systems and emergency rescue services (Rescue 1122) in KP to reduce response time and minimize the potential losses in the event of disaster/emergencies. Post COVID-19 pandemic, realization and learning still remains valid and NDRMF while adopting proactive approach is investing in strengthening the health systems in the most vulnerable and deprived health facilities of Balochistan and Gilgit Baltistan so that they can deal with the pandemics/health emergencies in a swift and efficient manner.

### NDRMF has completed First Batch of Projects 2018-2022

17 Projects USD 355.48 Million

### NDRMF Second Batch of Projects 2023-2024

Progressing on Reconstruction & Rehabilitation

11 Projects USD 37.14 M  
PKR 10,379.315 Billion Funded by  
NDRMF worth

## Second Batch of Projects 2023-2024

PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Restoration and Rehabilitation of Flood Damaged Water Conservation Structures in Irrigation Division Quetta	Balochistan Irrigation Department	992.679	Balochistan
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICT
	Flood Protection Water Conservation	11	Quetta
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Restoration /Rehabilitation of Flood Protection Structures and Water Conservation Structures in District Pishin	Balochistan Irrigation Department	990.727	Balochistan
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICT
	Flood Protection Water Conservation	24	Pishin
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Rehabilitation/Strengthening of Water Conservation Structures, Flood Protection Schemes in District Killa Abdullah and Naseerabad	Balochistan Irrigation Department	999.440	Balochistan
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICTS
	Flood Protection Water Conservation	8	Killa Abdullah Naseerabad
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Building Resilience of Damaged Flood Mitigation Structures along river Indus in Sindh Province	Sindh Irrigation Department	3,011.460	Sindh
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICTS
	Flood Protection	4	Shaheed Benazirabad, Naushero Feroz, Sajawal, Matiari
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Building Resilience of Damaged Flood Mitigation Structures along river Indus in Sindh Province - Phase II	Sindh Irrigation Department	463.375	Sindh
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICT
	Flood Protection	2	Sukkur



PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Strengthening of COVID 19 and other Infective Disease Response Capacity in Balochistan	Health Department Balochistan	903.722	Balochistan
	INTERVENTION THEMATIC AREA	HOSPITALS	DISTRICTS
	Health, Emergency Response	15	Quetta, Kech, Khuzdar, Gwadar, Awaran, Washuk, Nushk, Kharan, Killa Sifullah, Kalat
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Emergency Assistance to Strengthen Health System to Fight Against COVID 19 and Other Health Emergencies	Health Department Gilgit Baltistan	924.632	Gilgit Baltistan
	INTERVENTION THEMATIC AREA	HOSPITALS	DISTRICTS
	Health, Emergency Response	18	Gilgit, Skardu, Diamer, Nagar, Hunza, Ghizer, Shigar, Kharmung, Khaplous, Ghanche, Astore, Tangir
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Disaster Preparedness Support Plan for Emergency Rescue Services	Emergency Rescue Services Rescue 1122, Kyberpakhtunkhwa 3x GIAs/	1,375.744	KPK
	INTERVENTION THEMATIC AREA		DISTRICTS
	Emergency Response & Rescue		Abbottabad, Allai, Bajaur, Bannu, Battagram, Buner, Charsadda, Chitral, Dera Ismail Khan, Hangu, Haripur, Karak, Khyber, Kohat, Kolai Pallas, Kurram, Lakki Marwat, Lower Dir, Upper Dir, Malakand, Mansehra, Mardan, Mohmand, North Waziristan, Nowshera, Orakzai, Peshawar, Shangla, South Waziristan, Swabi, Swat, Tank, Tor Ghar, Lower Kohistan, Upper Koistan.
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Building Resilience by Strengthening the Community through Inclusive Disaster Risk Management (BRSC - II)	Muslim Aid Pakistan	200.696	Balochistan
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICTS
	Flood Protection	11	Killa Saifullah Loralai
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Promoting Integrated Mountain Safety in Northern Pakistan (PIMSNP III)	ARF/ARPBS	208.166	KP
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICTS
	Flood Protection	9	Chitral
	Early Warning System	2	Mansehra
PROJECT NAME	FIP NAME	TOTAL COST PKR MILLION	PROVINCE
Resilient and Adaptive Population in Disaster (RAPID-II)	Islamic Relief Pakistan	308.674	KP
	INTERVENTION THEMATIC AREA	SCHEMES	DISTRICT
	Flood Protection	4	D.I. Khan

## Progressing on Reconstruction & Rehabilitation

## Health, Emergency Response

## FIP-Sindh Irrigation Department

Funded by  
NDRMF worth

09



# Repurposing NDRMF



**Bilal Anwar**  
CEO NDRMF

Need for a long-term resilience building approach has never been more important or urgent in Pakistan. Climate change and other weather related shocks combined with persistent economic challenges, geo-political issues and uncontrollable population pressures demand a long-term and integrated approach for resilience building. Such approach would facilitate integration of disaster risk reduction and climate adaptation in all aspects of development planning and climate action. This exactly is the approach National Disaster Risk Management Fund (NDRMF) is envisaging and preparing itself to adopt under its new and revised strategic business approach.

As the premier and the only disaster risk reduction Fund under the Federal Government, NDRMF has come a long way since its inception. After having invested over USD 350 millions in a wide range of projects and program interventions across Pakistan, the institution has established itself well by making significant contributions in the reducing disaster and climate risks and fostering adaptation as part of its mandate – Making Pakistan Resilient.

The ongoing repurposing exercise of NDRMF is based on the premise that the notion of resilience has acquired a new meaning and demands enhanced degree of connectivity. In strict sense, it means designing and supporting interventions to increase diversity, connectivity, learning, reflexivity, inclusion and cohesion while generating new and blended knowledge areas.

NDRMF is transforming to evolve and position itself to play the role of the catalyst to fill the knowledge gaps, strengthen connectivity and facilitate piloting of new and innovative approaches in DRR projects and programmes embracing the prevailing, short and long-term impacts of climate change. And to pioneer the institutional mechanism for disaster and climate financing, data analytics and risk modelling.

The comprehensive and long-term business strategy of NDRMF has been designed to deliver to its mandated role of dealing with multifaceted challenges inherent in achieving sustained resilience, adjusting to shifting risk landscapes and effectively shaping the DRR and DRM practices and approaches in Pakistan. It will empower the organization to remain agile and responsive in the face of emerging challenges. Effectively managing the complex risk profiles that NDRMF deals with requires significant investments in research and development (R&D), dissemination of knowledge, and innovative solutions. These critical activities are optimally placed and integrated within the framework of NDRMF's long-term strategic approach.

It is convincingly envisioned that this new approach will provide a comprehensive framework guiding the organization in achieving its vision of making Pakistan a resilient nation. It aims to leverage the Fund's unique and widely acknowledged position as a financial intermediary to invest in and support initiatives enhancing the nation's resilience to natural hazards and climate change impacts. Methodically delineating the overarching objectives, principles of engagement, strategic objectives, desired outcomes, and the foundational pillars, the Strategy will govern NDRMF's endeavours over the 2023-2033 timeframe.

The scope of this strategy is truly and purposefully multifaceted: It extends to encompassing not only financial investments but also a commitment to technical and process proficiency, innovative approach and evidence-based knowledge creation. It also includes an essential element of broader aspect of capacity building of wide range of stakeholders and partners.

To achieve these goals and putting the strategy into action, NDRMF is sharply focused towards adopting more substantial, diverse, and innovative approaches: mobilizing increased and diversified resources for investment, encompassing a broader spectrum of thematic areas, and enhancing project quality through innovation, knowledge sharing, partnerships, and policy engagement while ensuring a cost-effective delivery that aligns with the evolving needs of the country.

National Disaster Risk Management Fund (NDRMF)

# What is Natural Catastrophe Modeling?

Natural Catastrophe (NatCat) Modeling uses data and analysis to create predictive models of risk and potential damage from natural disasters and extreme weather events. This model is referenced to estimate financial impact from catastrophic events. The following are the four basic modules of this catastrophe modeling:



## Hazard Module

Probabilistic hazard modeling of hydro-metrological and geophysical hazards

## Exposure Module

Development of a Tehsil level national exposure model (spatial geo-referenced dynamic GIS database of build and natural environment), this model will classify between detailed residential, commercial, lifeline, infrastructure (education and health facilities etc.), industrial stock and natural environment in terms of ecosystem services (agriculture, e.g. crops and livestock). Development of building typologies in major cities using ML and AI techniques with very high resolution satellite imagery and ground surveys.

## Vulnerability Module

Development of national vulnerability model (physical, socio-economic and environmental)

## Risk / Loss Estimation Module

Probabilistic integrated risk assessment and the ability to carry out scenario-based loss estimation up to Tehsil level for respective hazards. This component will also include the development and deployment of a web-based information system/ platform as a central repository to host the database. Customized interfaces of Risk calculators for MoPD&SI (spatial planning context) and FFC, and NatCat access to NDMA / PDMA and Insurance Industry / other identified power users



# Why Is Catastrophe Modeling Important?

1

Catastrophe modeling allows disaster management professionals and authorities to identify regions of potential risk, and take proactive measures to mitigate their exposure.

2

Insurers use catastrophic modeling data to set premiums for the upcoming season — and to build reserves to cover claims from losses.

3

Government officials can use data from catastrophe models to set land use policy in vulnerable regions.

4

Lenders can also use catastrophe models to establish more stringent lending practices, while savvy surveyors include catastrophe modeling data in surveying reports.

## Perils covered in this model

1

Probabilistic disaster risk modelling and assessment for the quantification of the risk posed by geophysical hazards (Earthquake, Tsunami and Landslide)

2

Probabilistic disaster risk modelling and assessment for the quantification of the risk posed by hydro-metrological hazards (Flood, Drought, Cyclone, Urban Flooding, Flash Flooding, Heatwave)

## Strengthening Partnerships for Shaping Resilience

NDRMF is developing a new approach towards business strategy focusing on improvised strategic pillars transformation to new business model having overarching approach. One of the important focus is on Building/Enhancing Partnerships. NDRMF has signed a number of Memorandum of Understanding (MoUs) with stakeholders including NUST, Muslim Hands, IRP, FFC, IWMI, OGDCL, Planning and Development Board Punjab and Rotary Pakistan.

The partnerships' scope encompasses collaborating for knowledge exchange and capacity building in the areas of climate change, disaster risk reduction. It seeks comprehensive DRR and climate adaptation through multi-sector interventions through strengthening disaster resilience in vulnerable regions, community education, responsible development advocacy, climate financing pursuits, and knowledge integration. As well as developing synergy among the NDRMF and academia for promoting research and capacity development activities, along with collaboration for project development and implementation of disaster-resilient activities in the country.

Under these partnerships, NDRMF intends to establish linkages with the stakeholders. These MoUs reflect the strong commitment of NDRMF and partners to work together towards a more sustainable and environmentally friendly future in Pakistan.

### Memorandum of Understanding (MoUs)

#### National University of Sciences & Technology (NUST)



Signed with Dr Rizwan Riaz, Pro-Rector Research, Innovation & Commercialisation (RIC) NUST

Islamabad 10th January 2023



Signed with Pro-Rector (Research, Innovation and Commercialisation) NUST, Dr. Rizwan Riaz

Islamabad 18 September 2023

#### Muslim Hands



Signed with Executive Director Muslim Hands Pakistan, Mr. Syed Javid Gillani

Islamabad 20th September 2023

#### Islamic Relief Pakistan (IRP)



Signed with Country Director IRP, Mr. Asif Sherazi

Islamabad 23 September, 2023

### National Disaster Risk Management Fund (NDRMF)



## Federal Flood Commission (FFC)



Signed with Chairman FFC,  
Mr. Ahmed Kamal

Islamabad 9th October, 2023

## International Water Management Institute (IWMI)



Signed with Dr. Mark Smith, Director General  
International Water Management Institute

Islamabad 30 October, 2023

## Oil & Gas Development Company Limited (OGDCL)



Signed with Ahmed Hayat Lak, Managing  
Director/ CEO OGDCL

Islamabad, 03rd November 2023

## Planning & Development Board Punjab



Signed with Chairman P&DB  
Mr. Iftikhar Ali Sahoo

Lahore 21st December 2023

## International Rescue Committee (IRC)



Ms. Shabnam Baloch,  
Country Director the (IRC)

Islamabad 4 January, 2024

## Rotary Pakistan



Signed with Imran Ghaznavi,  
Rotary Pakistan

Islamabad 26th January, 2024

## National Disaster Risk Management Fund (NDRMF)

# Knowledge Building Initiatives

As an important component of awareness and outreach initiative, NDRMF organised a series of webinars launched a Podcast series 'Voices of Resilience' from NDRMF's platform, hosted green talks and panel discussions during first ever expo on DRR by NDMA in collaboration with NDRMF. Also held fireside chats during Expo on Sustainability Investment by SDPI. With the purpose to engage effectively with stakeholders including development partners, government departments/ministries, United Nations (UN) agencies, International non-governmental organizations (INGOs), civil society, public & private sector and academia to strengthen link between NDRMF, government, institutions and stakeholders to exchange relevant experiences that allows further improving government's commitment to climate risk reduction.

NDRMF considers it a great opportunity for coalition building and awareness raising through these initiatives that would provide prospects for interacting, increased engagement, support in maintaining flow of communication by highlighting key issues country is facing related to climate change, disaster risk reduction (DRR), disaster risk financing (DRF) in addition, to presenting and showcasing the efforts and successful work of the government towards integrating climate resilient and environmentally sustainable policies in development plans as well as showcasing range of interventions and thematic projects being successfully undertaken by NDRMF.

## Green Talk



Green Talk-Climate Induced Disasters, Expo on PEDRR - 16 August, 2023



Panel Discussion-Investing in Adaptive and Resilient Future of Pakistan,  
Expo on PEDRR 17 August, 2023

National Disaster Risk Management Fund (NDRMF)



## Fireside Chats



Loss and Damage Fund Status  
19th November, 2023



Disaster Risk Financing Insurance  
Program 19th November, 2023

## Podcast Series-Voices of Resilience



### NDRMF 's Perspective

Dr Jahanzeb Chairman, NDRMF Board



### International Partnerships

With Country Director Asian Development Bank,  
Mr. Yong Ye



### Youth: The Torchbearers of Tomorrow

With Native Youth Club for Climate Change – NYCCC

National Disaster Risk Management Fund (NDRMF)

## Webinars (First Series 2022)



## MODERATOR OF WEBINAR



**Mr. Bilal Anwar,**  
CEO NDRMF

1<sup>st</sup> WEBINAR

## FINDINGS OF IPCC REPORT 2022- IMPLICATIONS FOR PAKISTAN

Wednesday, 15<sup>th</sup> June, 2022

**Syed Zafar Ali Shah,**  
Secretary Planning, Development  
& Special Initiatives



**Mr. Fahad,**  
Regional Lead, South Asia  
and the Middle East, Climate  
Analytics, (Germany)



**Mr. Shahbaz Mehmood**  
Head Climatology and  
Environment Global Change  
Impact Studies Centre



**Dr. Faheem Khokar,**  
National University of Science  
and Technology, Islamabad



**Asif Khan,**  
Water and Climate change  
expert, individual  
consultant, ADB



**Mr. Mian Asad Hayatuddin**  
Secretary, Economic  
Affairs Division

2<sup>nd</sup> WEBINARDISASTER RISK FINANCING IN PAKISTAN: MANAGING CLIMATE CHANGE  
AND DISASTER RISKS FOR RESILIENT DEVELOPMENTMonday, 4<sup>th</sup> July, 2022

**Ms. Sherry Rehman,**  
Federal Minister for  
Climate Change, Pakistan



**Mr. Yong Ye,**  
Country Director for  
Pakistan, ADB



**Dr. Abid Gaiyum Suleri,**  
Member BoD, NDRMF/  
Executive Director, SDPI



**Dr. Mohsin Hafeez,**  
Country Representative,  
IWM, Lahore



**Mr. Andreas Bollmann,**  
Consultant NDRMF



**Ms. Nasreen Rashid,**  
Consultant NDRMF

3<sup>rd</sup> WEBINARCREATING AN ENABLING ENVIRONMENT  
FOR DISASTER RISK FINANCING IN PAKISTANWednesday, 27<sup>th</sup> July, 2022

**Mr. Waseem Khan,**  
Director/HOD, Insurance Division,  
Security Exchange Commission  
of Pakistan (SECP)



**Dr. Muammad Saleem,**  
Chief Executive Officer, Saudi  
Mortgage Guarantee Company,  
Riyadh, Saudi Arabia



**Mr. Raymond Zingg,**  
Regional Forecast-based  
Financing Coordinator,  
IFRC Asia Pacific  
Regional Office



**Mr. Azfar Arshad,**  
Chairman, Insurance  
Association of Pakistan  
(IAP), Islamabad



**Mr. Adrianus Vugus,**  
International DRR  
Specialist NDRMF  
Consultant

4<sup>th</sup> WEBINAR

## RATIONALIZING THE ECONOMIC CASE FOR DRR/DRM IN PAKISTAN

Wednesday, 7<sup>th</sup> September, 2022

**Mr. Sajjeed Aslam,**  
Regional Lead Public Affairs-  
Asia Pacific, Association of  
Chartered Certified Accountants  
(ACCA)



**Dr. Shafiqat Munir Ahmad,**  
Research Fellow/Director,  
Resilient Development Program  
and Director Policy Outreach,  
SDPI



**Ms. Aisha Khan,**  
Chief Executive -  
Civil Society Coalition  
for Climate Change  
(CSCCC)



**Mr. Raja Rehan Arshad,**  
International Development  
Specialist - Ex-Lead Disaster Risk  
Management and Resilience  
Specialist - World Bank

5<sup>th</sup> WEBINARDISASTER RISK MANAGEMENT IN PAKISTAN -  
CHALLENGES, LESSONS AND INNOVATIONS

**Mr. Meroof Ali Syed,**  
CEO, Center for Economic  
Research in Pakistan (CERP),  
Senior Fellow and Advisor at  
Harvard's Evidence for Policy  
Design (EPoD)



**Mr. Ali Tauseef Sheikh,**  
Board Member - NDRMF



**Ms. Farah Hendjour,**  
Director/Head of Partnerships,  
Agri-Khush Foundation  
(AKF) Pakistan



**Ms. Nusrat Nasab,**  
CEO, Agha Khan Agency  
for Habitat (AKAH) Pakistan



**Mr. Chris Kaye,**  
Country Director,  
World Food Programme  
Pakistan



**Muhammad Fawad Hayat,**  
DG/Head Climate  
Change Unit NDRMF



## Webinars (Second Series 2023)

**UNDERSTANDING CARBON MARKETS  
& POTENTIAL FOR PAKISTAN**

**Mr. Bilal Anwar**  
CEO-NDRMF  
(Moderator of the Webinar)



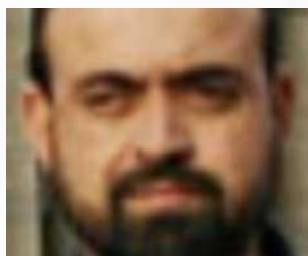
**Mr. Umamaheswaran  
Krishnan**  
UNFCCC RCC Dubai



Moderator:  
**Mr. Muhammad  
Fawad Hayat**  
DGM-NDRMF

**RESILIENT PAKISTAN  
NAVIGATING DISASTER  
RISK FINANCING CHALLENGES**

**Mr. Bilal Anwar**  
CEO-NDRMF  
(Moderator of the Webinar)



**Dr. Muhammad Farooq**  
Project Director (NatCat),  
Suparco- Pakistan



**Mr. Ali Tauqeer Sheikh**  
Member  
Board of Directors - NDRMF



**Mr. Kamal Ali**  
DRF Consultant,  
NDRMF Islamabad



**Rana Wajid**  
(Ex-Secretary Finance)  
Ministry of Finance  
Government of Pakistan



**Mr. Rizwan Hussain**  
MD & CEO of Salaam  
Takaful Limited

National Disaster Risk Management Fund (NDRMF)

## News & Events

### NDRMF Board Meetings

NDRMF is governed by its General Body/Board of Directors duly appointed by the Federal Government, being the competent authority. Currently, the General Body/Board of Directors of NDRMF consists of nine Members/Directors including the Chief Executive Officer duly appointed by the Federal Government.

The Board of NDRMF convenes on a quarterly basis to discharge its legal obligations. The Board reviews the Company's progress, engages in decision-making processes pertaining to significant policy matters, and establishes the strategic direction of the Company in alignment with its business plan. The Board Meetings serve as a platform for the Board to discharge its fiduciary responsibilities, ensuring the effective governance and sustainable growth of the Company.

NDRMF has successfully conducted its 37 Board Meetings. The Board Committees within NDRMF operate with utmost efficiency, diligently executing their respective duties, actively contributing to the decision-making processes of the Board, ensuring that their collective efforts are directed towards advancing the best interests of the Company.



37 Board of Directors Meeting 29 December 2023

### Dialogue on “Climate Water Food Nexus - Need for Integrated Approaches”

NDRMF organized dialogue, on “Climate Water Food Nexus - Need for Integrated Approaches”, collaboratively organized by NDRMF, World Wide Fund for Nature (WWF-Pakistan) and Federal Flood Commission (FFC) held on 24th July 2023. The dialogue featured notable experts and representatives from various organizations, shared their insights and expertise on pertinent topics related to climate resilience, climate finance, integrated flood management, freshwater conservation and need for partnerships for climate resilience.



### National Disaster Risk Management Fund (NDRMF)



## Study Tour to The Urban Unit Punjab, Urban Sector Planning & Management Services Unit (Pvt.) Ltd.

NDRMF team visited the Urban Unit Punjab at Lahore on 28 September, 2023 that provided opportunity to learn insight of both departments. Reviewed its regulatory operational and organizational structure being a pioneer public sector company of Government of Punjab. The teams discussed GIS operations, MIS and IT systems, Transport and connectivity, environment and water, economics on projects and communications projects that facilitated in enhancing knowledge and exploring innovative ideas.



Urban Unit Briefing by CEO Urban Unit, Mr. M.Omar Masud

## Round Table on “Pakistan’s Road Map for COP28

NDRMF organized a Round Table on “Pakistan’s Road Map for COP-28” held on 18th October, 2023 at NDRMF. The event aimed to support Pakistan’s climate change action efforts, which included the country’s National Climate Change Policy, National Adaptation Plan and its commitment to the Paris Agreement in the shape of NDC’s. The Round Table also intended to help the nation present a country stance, with the public and private sector working in collaboration, to a global audience when the world comes together at COP28 in UAE to address climate change on a global level.





### Seminar on “Leveraging Carbon Markets to enable Private Investment

NDRMF organized a seminar on Leveraging Carbon Markets to enable Private Investment, held on 24th October, 2023 in Karachi. The Seminar was intended to build understanding of Private Sector regarding Carbon Markets and explore the Private sector potential, role and devise a road map to avail this opportunity in a timely manner.



Panel Discussion: Carbon Markets Potential for Pakistan & Role of Private Sector

### NDRMF Won Sustainability Award

An exclusive Sustainability Investment Expo and Sustainability Awards were held by SDPI from 19th-20th November, 2023. Aimed to showcase and acknowledge the efforts of stakeholders demonstrated outstanding commitment to sustainability across various dimensions. Case studies were invited from organizations in different categories. NDRMF won The Sustainability Award 2023 for its case study under the category of Climate Risk Insurance.



National Disaster Risk Management Fund (NDRMF)



## High level dialogue on “Pakistan's Roadmap for COP 28-Expectations & Goals”

A high level dialogue on “Pakistan's Roadmap for COP 28-Expectations & Goals” was organized by NDRMF in collaboration with Ministry of Climate Change & Environmental Coordination held on 22nd November, 2023, at Islamabad. The dialogue aimed at taking into account the inputs of key stakeholders, build partnerships & synergies and facilitated in framing the Pakistan's agenda for the UNFCCC's International Climate Change Conference (COP28) which held at Dubai, United Arab Emirates from November 30–December 12, 2023. The event was also aimed to deliberate on positioning of Pakistan in line with new disaster and climate change response policy developments.



Mega COP28 event-NDRMF launched COP28 website



Mega COP 28 event-NDRMF launched COP28 Newsletter



Mega COP 28 event - Panel discussion-Navigating COP28 strategy and priorities

National Disaster Risk Management Fund (NDRMF)



### NDRMF Pavilions - Exhibiting NDRMF Achievements

NDRMF setup pavilions with exquisite display of its mandate, projects and features as a brand entity. Designed and fabricated from the perspective of projects completed in most vulnerable districts across Pakistan, initiatives undertaken for DRF, NaTCat model, climate resilience, supported Pakistan's perspective for COP 28 theme in order to promote sustainable development. Also heightened the importance of building resilience adopting a more proactive approach towards risk reduction.



First ever expo on PEDRR jointly organised with NDMA 16-18 August 2023



Expo on Sustainability Investment in partnership with SDPI 19-20 November, 2023



Pre COP 28 event in collaboration with MoCC 22 November, 2023

National Disaster Risk Management Fund (NDRMF)



### NDRMF Talent Cultivation Program- Providing Technical Knowledge Developing New Skills

As a part of NDRMF's commitment to foster talent development and enhance capacity building, an Internship Program has been initiated in FY 2023-24 which is a strategic initiative to attract young and talented individuals from diverse academic backgrounds engaged in, at minimum, their Bachelors studies, to meet their degree requirements or to gain practical experience. The maximum internship tenure is 3 months with a stipend of Rs. 30,000/- per month.

The main aim is to bring fresh perspectives and ideas, enhancing our organizational culture. They (interns) can bridge the gap between academic knowledge and practical application, enriching the capabilities of our existing workforce. During their tenure with NDRMF they are assigned to various departments and projects, allowing them to gain hands-on experience and exposure to critical aspects of disaster risk management, project implementation, finance, communications, corporate governance and more. Each intern is assigned a dedicated mentor who guides and supports them throughout their internship journey."



# Representation at Forums

As part of outreach campaign, NDRMF has been actively engaged with diverse range of stakeholders representing NDRMF stance and contributions at various forums. In order to collaborate for knowledge exchange and capacity building in areas of climate change adaptation mitigation, adopting risk modeling approaches and risk reduction initiatives through seminars, workshops and events. These multilateral forums also provided opportunity to NDRMF as an image building tool to engage with various climate change policy makers, practitioners and discussed initiatives taken as part of climate action.

Representation of NDRMF at prestigious forums brings along discussion on critical challenges, practical opportunities, and way-forward recommendations from the participants translating it all towards sharing collective vision of promoting culture of climate resilience and sustainable future for the Country.



Dialogue on COP 28 & Beyond:  
Strengthening Climate Action through  
Public Private Partnerships - 19 September, 2023



NDRMF Participation at  
GB Career Fest in Skardu  
22-24 September, 2023



Panel Discussion Policies for more Effective Innovation  
System for Water Security at a Conference, Pre CoP 28 on  
Accelerating the Water Food Climate Nexus  
Transformation Pathways for Pakistan - 30 October, 2023



Private Roundtable on Socio-Environmental & Governance  
dimensions of hydropower projects in Pakistan.  
United States Institute for Peace - 5 January, 2024





Roundtable Workshop "Climate Resilient Water Governance Approaches for Hill Torrent Management in Pakistan". Co-organised by DAI Global RSPN, SDPI - 9 January, 2024



First meeting by SDPI on "Steering Committee" of Network for Clean Energy Transition (NCET) in Pakistan at Private Power and Infrastructure Board (PIB) - 16 January, 2024



Climate Change Round Table: Shaping Tomorrow's Resilience: Post COP 28 Stakeholders Consultation by Center for Sustainable Development Goals at the Center of Pakistan and International Relations (COPAIR). 16 January, 2024



Regional Dialogue 2024 Climate Crisis: Shaping South Asia's Resilience. Institute of Regional Studies 24 January, 2024



Panel Discussion - Fostering leadership and innovation among the youth. Rotary Pakistan. 26 January, 2024

## National Disaster Risk Management Fund (NDRMF)



## Readers Corner

### Pakistan Alone Cannot Resolve its Smog Issue: The Fifth Season in the Country



**Prof. Dr. Muhammad Fahim Khokhar**

SCEE(IESE), National University of Sciences and Technology

South Asia is one of the most polluted and densely packed regions in the world. Its population of approx. 2 billion has endured some of the most unprecedented crises and now they are confronted with the challenges of air pollution. Recent economic growth and developmental activities have given rise to episodic air pollution events in various South Asian cities. Since the past few years, the recurring air pollution episodes have devastated the lives of citizens across the region, and due to regular occurrences, they have been labeled as “the fifth season” in the region. This is a new addition to the region’s climatology and has been observed most prominently during the post-monsoon season (October to November) due to extensive human activities and stable meteorological conditions.

In Pakistan, the reduced visibility incidences cause socio-economic disruptions along the Indus plains of Punjab and some other regions as well. The onset of the fifth season is followed by large-scale socio-economic disruptions, the closure of schools and businesses, traffic accidents, and poor health conditions. An estimated 128,000 deaths in Pakistan and around 1.2 million deaths in India have been linked to exposure to the worst air pollution annually. According to the data available from the air quality monitoring stations of US Consulate Offices in Lahore and Delhi, periods of low visibility are linked with high concentrations of atmospheric pollutants such as PM<sub>2.5</sub> and other reactive gases. This is most prominent during the post-monsoon season when the high-intensity agricultural residue burning in the Indo-Gangetic Plain (IGP) acts as the main driver of air pollutant loads.

The present study (Majeed et al., 2024) attempts to comprehend the reasons for the recent increase in the intensity and frequency of air pollution episodes by utilizing ground-based and satellite observations. The findings direct towards an increase in air pollution sources as crop residue burning, and vehicular emissions have contributed to the increased frequency and intensity of such events. If we consider two of the most polluted cities of South Asia i.e. Lahore and Delhi, an increase in aerosol loads has been observed during the period of post-monsoon. This is because of agricultural burning emissions that have a significant role in defining the air quality of the region. Meteorological data of Lahore city indicates that during the months of October and November, the reduced visibility is not due to fog (which occurs during winter), as the humidity was quite low, with warmer temperature, wind speed, and normal boundary layer height. Rather, it can be attributed to the primary smoke of rice paddy fires in India and Pakistan, which have hampered the visibility on either side of the border.

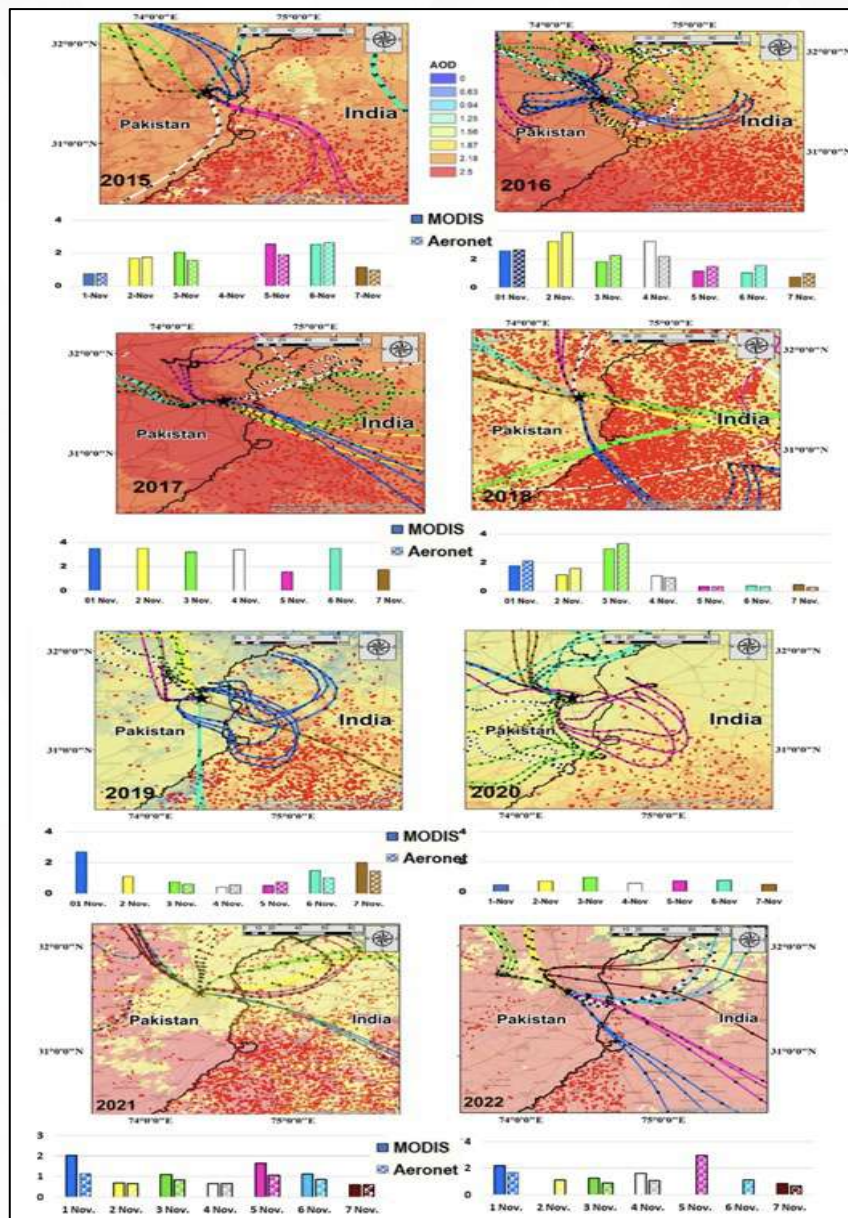
The case of other mega cities in IGP region such as Kathmandu is a bit different as there is an increase in unhealthy days during the pre-monsoon season (March-May). Since strong convective storms occurred during pre-monsoon, the transport of surface aerosol above the boundary layer takes place. However, it is less influenced by the rice paddy fire cycle in the IGP region as the aerosol loads remain low and there is most likely a local pattern in aerosol loads consistent for the whole year. Similarly, in the case of Dhaka city, the air quality is not affected by the agriculture fires in the western parts of IGP but rather mostly influenced by the local sources and partially by transboundary sources. During the winter period, the phenomenon of temperature inversion (i.e. air temperature increases with height) occurs, and the large concentration of pollutants observed in the atmosphere leads to more hazardous levels of air quality and consequent health and socio-economic disturbances.

Since the year 2016, there have been severe episodes of smog during the first two weeks of November in both India and Pakistan. The extension of smog has been observed for hundreds of kilometers over the Punjab region on either side of the international border. The present study revealed that high Aerosol Optical Depth (AOD) values could be a result of the emissions from agriculture fires combined with industrial activities and vehicular emissions winds carrying them across the border. This trend is consistent throughout the first seven days of November from 2015 to 2019 with slight variations. During the year 2020, no significant contribution from transboundary emissions was identified during the first seven days of November, mainly due to a reduction in human activities during pandemic lockdowns (COVID-19). In the last two years i.e. 2021 and 2022, a notable change was



observed in transboundary pollution. In 2021, AOD levels were high in the studied period and high agricultural residue-burning was noticed in the Indian region whereas after the strict compliance and implementation of the National Clean Air Programme (NCAP) by India, a remarkable reduction in fire activities was observed in 2022. Overall, it can be speculated that smog episodes experienced in the city of Lahore over the years are primarily caused by the transboundary agriculture fire in India, as inferred from satellite observation in association with other analysis tools (HYSPLIT Model).

The consistent occurrence of air pollution episodes has increased the political awareness and importance of air quality in the communities of Pakistan and India. However, several technical issues such as the lack of air quality monitoring setup (especially in Pakistan), lack of historical data, and accuracy of existing data have made it difficult to study the air quality issue in-depth and understand the mysteries. Although Pakistan has put significant efforts into addressing the issue of smog; the Government of Punjab officially launched its Policy on Controlling Smog in 2017. The country took various tangible actions to reduce the impact of air pollution through the introduction of low-sulfur fuels, better vehicular standards, adoption of pollution reduction technologies, traffic management strategies, and severe restrictions on agricultural residue and solid waste burning. However, besides all these measures, there is still less reduction in annual smog episodes which are primarily driven by both local and transboundary agricultural residue burning and indicates that Pakistan alone cannot resolve it without regional cooperation.



**Figure:** HYSPLIT Back Trajectories calculated over the region and ending up in the city of Lahore (encircled Black Star), Pakistan for the year 2015 to 2022. Graphs in each panel show the comparison of AOD derived from AERONET and MODIS observation on respective days. While background colors in maps are MODIS derived AOD over the study region averaged over first seven days of November for the respective year. Red dots indicate the active fires observed by NASA's MODIS. Adopted from (Majeed et al., 2024).

## References:

Majeed R, Anjum MS, Imad-ud-din M, Malik S, Anwar MN, Anwar B, Khokhar MF. Solving the Mysteries of Lahore Smog: The Fifth Season in the Country. *Frontiers in Sustainable Cities*.;5:1314426.2024

# Unleashing Transformation

## Pakistan's National Disaster Risk Management Fund (NDRMF) Creates Hope through its Project

### Restoration of Riverine, Inland, Mangroves, Dry-land & Urban Ecosystems of Sindh Province

In the world of global climate action, countries often pledge their support to help developing and Least Developed Countries (LDCs) during events like COP. However, the journey from planning to action can be challenging, and the true needs of these countries may be overlooked. Despite these obstacles, a positive example exists in Pakistan, where the National Disaster Risk Management Fund (NDRMF) stands as a testament to unwavering determination and a strong desire to make a difference.

In Sindh, marginalized communities are finding hope through green jobs, leading to positive changes in once desolate lands. Environmental preservation is taking shape in Sindh, with cities witnessing a transformation as urban forests, green belts, and revitalizing jogging tracks emerge. Previously overlooked women and children now find solace in these green spaces.

**Mangroves: A Climate Change Shield:** One of the most inspiring initiatives is the planting of a protective layer of mangroves across 55,000 acres. This effort safeguards Karachi and the coastal belt from climate challenges and sets the stage for future carbon credits. By involving women in plantation activities, the NDRMF bridges societal norms with environmental preservation, empowering local communities. An extraordinary transformation is taking place along the Liyari River, once a dumping ground for wastewater. Now, it is being transformed into a lush green belt adorned with trees and plants. By planting urban area forests, cities are embracing a greener future.

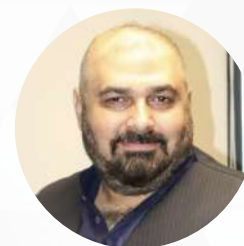
As you travel alongside the canals, nature flourishes. The growth of trees combats soil erosion and provides a soothing refuge from the sun. This symphony of life also ensures the conservation of precious sweet water, protecting it for generations to come.

The NDRMF chooses actions over words, making a profound impact without extravagant displays. Against all odds, it forges an extraordinary path forward, showcasing the beauty that emerges when passion and dedication intertwine.



Canal side plantation

In the face of adversity, the National Disaster Risk Management Fund (NDRMF) emerges as a true champion of change, transforming lives and flourishing barren landscapes with greenery and hope. Sindh province in Pakistan bears witness to this remarkable journey, exemplifying the power of determination, resilience, and transparent funding mechanisms, proving that miracles can happen even in challenging circumstances. With every tree planted and each life transformed, the NDRMF paves the way for a brighter, greener future—an enduring symbol of the human spirit and commitment to creating a better world for all.



M. Mujahid Afzal

Deputy Manager- Fund Management @  
Project Appraisal, NDRMF, Author



## Gallery



NDRMF funds PKR 450 million to NIH with Australian support to strengthen Covid-19 Surveillance. 4th January 2023



NDRMF funds PKR 450 million to NIH with Australian support to strengthen Covid-19 Surveillance. 4th January 2023



14th Technical Advisory Committee (TAC) 03 February 2023



CEO Summit. 16 February 2023



AFD Inception Mission Health and Social Protection. 14 March 2023



CEO National Insurance Company Limited, Mr Khalid Hamid. 22 March 2023, Karachi



roundtable conf ON drf by UNDP Karachi. 22 March 2023, Karachi





Donors Conference 9 Feb 2023



Mission Director USAID Pakistan, Mr. Reed Aeschliman 10th April, 2023



Consultative Workshop-  
Early Drought Warning System for Pakistan, 9 June 2023



UN World Food Programme (WFP) Mission 15 June, 2023





First Aid Training 20 June 2023

## Dialogue on Climate Water Food Nexus – Need for Integrated Approaches - 24 July, 2023



Dr Adil Najam, President  
WWF International



Mr. Hassan Nasir Jamy  
Secretary Ministry of Water Resources





# First ever expo on PEDRR jointly organised with NDMA

16-18 August 2023



NDRMF Team at 1st ever Expo on DRR jointly organised by NDRMF and NDMA 16-18 August, 2023



Speaker of National Assembly  
Mr. Raja Pervaiz Ashraf



Deputy Chairman, Senate of Pakistan,  
Mirza Muhammad Afridi as a chief guest



With Rector National University of Technology (NUTECH),  
Lt. Gen. Moazzam Ejaz (Retd)



World Bank Team in discussion with  
NDRMF Team during EXPO



# First ever expo on PEDRR jointly organised with NDMA

16-18 August 2023



NDRMF Team at 1st ever Expo on DRR jointly organised by NDRMF and NDMA 16-18 August, 2023



United Nations Resident Coordinator in Pakistan, (UNRC) Mr Julien Hameis at NDRMF Pavilion at EXPO on DRR 16 August, 2023



Briefing to Country Director ADB, Mr Yong Ye at NDRMF Pavilion



Mio Sato, Chief of Mission International Organization for Migration



Secretary Relief Rehabilitation and Settlement Department (RRSD) KPK Mr. Abdul Basit



# First ever expo on PEDRR jointly organised with NDMA

16-18 August 2023



Chairman NDMA with CEO NDRMF at Expo on DRR jointly organised by NDRMF and NDMA 16-18 August, 2023



Panel discussion at Expo on DRR jointly organised by NDRMF and NDMA 16-18 August, 2023



CEO National Insurance Company Limited (NLC), Mr. Khalid Hamid







Presenting Annual Report 2022 to  
UNRC Mr Julien Hameis. 8 September,2023



Meeting of NDRMF delegation with IG Motorway Police,  
Mr. Sultan Ali Khowaja 8 September,2023



Seminar on Accessing climate finance for a  
resilient Pakistan by SDPI 19 September,2023



NDRMF Board 11th Nomination Committee  
Meeting chaired by caretaker Planning Minister,  
Mr. M. Sami Saeed 22 September,2023



Session with National Youth for Climate Change Nationwide alliance 28 September,2023





Study Tour to Urban Sector Planning Management Services Unit (Pvt), Ltd Urban Unit Lahore.  
28 September, 2023



Meeting with Ex Dir OGDCL(Petroserv,  
M Aamir Salim 16 October, 2023



Panel discussion during seminar on carbon markets.  
24 October, 2023



Closing remarks by Joint Secretary MoPDSI  
Mr Tassaduq Hussain during seminar on carbon markets. 24 October, 2023





Panel Discussion Policies for more Effective Innovation System for Water Security at a Conference, Pre CoP 28 on Accelerating the Water Food Climate Nexus Transformation Pathways for Pakistan- 30 October, 2023



Mock exercise on Emergency Evacuation and Firefighting in coord with Civil Defence Pakistan. 31 October 2023



Meeting with Urwah Khan, PhD. Climate Advisor  
Section of Institutional Development  
UNEP Copenhagen Climate Centre.  
Islamabad 3rd November, 2023



Capacity building and knowledge sharing convention  
of Pathfinder 8 November, 2023





Minister MoPDSI M. Sami Saeed reviews NDRMF progress. 8 November, 2023



Interaction with Environmental journalists.  
18 November, 2023



Former Federal Minister for Climate Change, Senator Sherry Rehman visited NDRMF pavilion at sustainability expo 19 November, 2023



NDRMF partners with SDPI for EXPO on sustainability Investment 19 November, 2023



Pre COP 28 event in collaboration with MoCC 22 November, 2023



UAE Ambassador, H.E Hammad Obaid Ibrahim Salem Al Zaabi attended NDRMF



Mr. Ahmed Irfan Aslam Federal Minister for MoCC, Mr. Syed Zafar Ali Shah, Secretary MoCC, Hamed Yaqoob Sheikh - REMIT Pakistan, NDRMF



Study Tour-students of BS sociology from Quaid e Azam University of BS Sociology from Quaid e Azam University as part of study tour to gain information. 10 Jan 24



Meeting with Oxford Policy Management team. 11 January, 2024



Meeting with Ms Priscilla Akayla Forde Ass Sp Business Development Env & Health DAI- Mr Darren Saywell, Sn Lead sp Water Security, Sanitation and Hygiene DAI





Training of trainers on DRM organised for National Youth for Climate Change 12 January, 2024



ADB Review Mission to discuss Climate and Disaster Resilience Enhancement Program.  
15 January, 2024



Meeting with Ambassador of Azerbaijan H.E. Khazar Farhadov and Ms Amna Munawar President (COPAIR) 16 Jan 2024





MEDIA DEPARTMENT NDRMF