



**SPECIAL STUDY
ON
CLIMATE CHANGE POLICY AND ITS
IMPLEMENTATION WITH RESPECT TO
DISASTER PREPAREDNESS IN PAKISTAN**

AUDIT YEAR 2020-21

AUDITOR GENERAL OF PAKISTAN

PREFACE

Articles 169 & 170 of the Constitution of the Islamic Republic of Pakistan, 1973 read with Sections 8 and 12 of the Auditor-General's (Functions, Powers and Terms and Conditions of Service) Ordinance 2001, requires the Auditor-General of Pakistan to conduct audit of receipts and expenditure of the Federation and the Provinces or the accounts of any authority or body established by the Federation or a Province. The special study on Climate Change Policy and its implementation with respect to Disaster Preparedness in Pakistan was carried out accordingly.

The Directorate General Audit (CC&E) conducted special study on Climate Change Policy and its implementation with respect to Disaster Preparedness in Pakistan during the Audit Year 2020-21 covering period from July, 2018 to June, 2021 with a view to report significant findings to the relevant stakeholders. Special Study indicates specific actions and recommendations that, if implemented, will help the management and policy makers to achieve the objectives of the National Climate Change Policy.

The findings were reported to the PAO for convening DAC meeting. However, no DAC meeting was convened till finalization of this report. Last reminder was issued on 03.06.2022.

The Special Study is submitted to the President of the Pakistan in pursuance of the Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before the National Assembly.

-Sd/-

(Muhammad Ajmal Gondal)
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Islamabad

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ADP	Annual Development Programme
AGP	Auditor General of Pakistan
CBDRM	Community Based Disaster Risk Management
CC&E	Climate Change & Environment
CDWP	Central Development Working Party
CGA	Controller General of Accounts
DM	Disaster Management
DDMA	District Disaster Management Authority
DDMC	District Disaster Management Commission
DRIF	Disaster Risk Insurance Framework
DMIS	Disaster Management Information System
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ERRA	Earthquake Reconstruction and Rehabilitation Authority
FFC	Federal Flood Commission
GBDMA	Gilgit-Baltistan Disaster Management Authority
IEE	Initial Environmental Examination
ISSAIs	International Standards of Supreme Audit Institutions
INTOSAI	International Organization of Supreme Audit Institutions
JICA	Japanese International Cooperation Agency
LEAD	Leadership for Environment and Development
MHVRA	Multi Hazard Vulnerability Risk Assessment
MOCC	Ministry of Climate Change
NCCP	National Climate Change Policy
NDCs	Nationally determined Contributions
NCCPIC	National Climate Change Policy Implementation Committee
NDMA	National Disaster Management Authority
NDMC	National Disaster Management Commission
NDRMF	National Disaster Risk management Fund
NDMP	National Disaster Management Plan

NDRF	National Disaster Response Force
NDRP	National Disaster Response Plan
NGO	Non-Governmental Organization
PC-I	Planning Commission Proforma I
PDMA	Provincial Disaster Management Authority
PDMC	Provincial Disaster Management Commission
PMD	Pakistan Meteorological Department
SDGs	Sustainable Development Goals
SDMA	State Disaster Management Authority
SOP	Standard Operating Procedure
SROs	Statutory Regulatory Orders
ToRs	Terms of References
UNDP	United Nation Development Programme
UNFCCC	United Nation Framework Convention on Climate Change
WMO	World Meteorological Organization

EXECUTIVE SUMMARY

The Directorate General Audit (Climate Change & Environment), a Field Audit Office of the Auditor General of Pakistan is mandated to conduct statutory audit of Disaster Management and Environment related organizations at federal, provincial and district level. The Directorate General mainly conducts Compliance Audit, Certification Audit, Performance Audit and Special Studies with an environmental perspective of a number of organizations including ERRA, NDMA, PDMAs/DDMAs, Environmental Protection Agencies, Civil Defence and Rescue 1122 establishments etc.

Special study on “Climate Change Policy and its implementation with respect to Disaster Preparedness in Pakistan” was included in the Audit Plan of the Directorate General Audit (CC&E), Islamabad for the year 2019-20 and was executed during the second phase of the audit year 2020-21 (January-June 2021). The objective of the special study was to evaluate the implementation status of the National Climate Change Policy and to suggest the way forward.

Since the audit was cross cutting in nature, therefore a well-thought-out and comprehensive audit methodology was evolved to cover the assignment properly. The evidence was primarily gathered through observation; documentary review; discussion with the management; assessment of relevant policy documents; field visits, interpretation and analysis of secondary data.

a. Key Audit Findings

As a result of study, a number of issues have been discussed in detail in Section-III. Key audit findings are as under:-

- i. Climate Change Policy Implementation Committee meetings not convened on regular basis.
- ii. Climate Change sections have not been established in the Ministry of Planning Development and Special Initiatives.

- iii. Assessment of climate change impacts through Environment Impact Assessment and Initial Environment Examination not carried out.
- iv. No follow up was made by the Ministry of Climate Change for evaluation of development projects on the basis of National Climate Change Policy.
- v. National Climate Change Council was not functional.
- vi. Pakistan Climate Change Authority was not functional.
- vii. Pakistan Climate Change Fund was not established.

b. Recommendations

Based on the audit findings, it is imperative that the concerned agencies shall make an effort to consider and improve upon the areas highlighted in the report and implement the recommendations in true spirit within a reasonable time. Key

- i. Ministry of Climate Change should ensure convening of regular or biannual meeting on the implementation status of the Climate Change Policy.
- ii. Mechanism/SoPs should be devised for effective implementation, coordination and monitoring of National Climate Change Policy (NCCP)
- iii. Climate Change section/wings should be established and made functional in all EPAs and planning departments.
- iv. It should be ensured that climate change impact has been included while preparing IEE/EIA of development projects.
- v. Ministry of Planning Development & Reforms and Special Initiatives as well as Provincial P&D Departments should priorities and allocate funds on the basis of National Climate Change Policy.
- vi. National Climate Change Council and Pakistan Climate Change Authority should be made functional.
- vii. Pakistan Climate Change Fund should be established

Section-I

1. Introduction

Pakistan is highly vulnerable to numerous climate related natural disasters. Climate change in Pakistan is likely to increase climate-related natural disasters with increase in the frequency and intensity of disasters including floods, droughts, cyclones, landslides triggered by heavy rains, urban flooding and earthquakes. Pakistan is already experiencing climate change impacts that are too visible to ignore. Most natural disasters like floods, droughts, cyclones etc. cannot be avoided or prevented. However, with appropriate adaptive and preparedness measures, along with proper climate-resilient development response in risk prone areas, these disasters can be prevented or their impact can be reduced.

The National Climate Change Policy was approved in 2012 which comprehensively addresses all possible challenges of Climate Change adaptation and mitigation in foreseeable future; and provide initial framework for ensuing Climate Change Action Plans, Programs and Projects. A framework for implementation of Climate Change Policy was developed in 2013.

The Climate Change Policy is an elaborate document covering a number of areas. However, keeping in view scarce resource i.e. time, cost and audit jurisdiction, the scope of the study was kept limited to review and comment on one component of the National Climate Change Policy i.e. “Disaster Preparedness”.

1.1 Focus of Special Study

This study is focused on climate change policy and its implementation of actions identified in framework for implementation of National Climate Change Policy with reference to disaster preparedness. Pakistan is among those countries which are vulnerable and negatively impacted by the effects of climate change. Its exposure to natural hazards with significant dependence on monsoon rainfall and the glacier-fed-Indus Basin make it vulnerable to climate change.

1.2 Purpose and scope of Study

The study was conducted:

- a. To review the National Climate Change Policy in the light of international and National commitments on environment.
- b. To check whether federal and provincial disaster and climate change departments are adequately equipped to respond to disasters.
- c. To evaluate the implementation status of actions identified in framework for implementation of NCCP at Federal and Provincial level.
- d. To suggest the way forward based on findings of the study.

1.3 Responsible Authorities

Ministry of Climate Change, Ministry of Water and Power, National Disaster Management Authority, Provincial Disaster Management Authorities, District Disaster Management Authorities, Pakistan Meteorological Department, Federal Flood Commission, Planning and Development Division and Provincial Irrigation Departments are the main agencies.

1.4 Beneficiaries of Study

The beneficiaries / stake holders of the study either directly or indirectly are Federal/ Provincial/ District Governments and General Public. The Government organizations identified as major stakeholders are as under:

- 1) Ministry of Climate Change
- 2) National Disaster Management Authority
- 3) Provincial Disaster Management Authorities
- 4) District Disaster Management Authorities
- 5) Provincial Planning and Development Departments

1.5 Study Design

i. Time Period

The time period selected for the study is from July, 2018 to June, 2021. The preparedness and response activities carried out in the

abovementioned period and previous projects / data have also been consulted /commented for the subject study.

ii. Nature of Data

Most of the data relating to this study is qualitative in nature. Data concerning response to audit queries, minutes of the meetings with entity officials and policies/procedures has been consulted / obtained in the formulation of this study. Websites and publication like NDMA Act, NDMP, NDRP, DRR Sendai Framework, Provincial and District Plans, ADB Guidelines, contingency plans etc. The team also conducted field visits, made discussions with entity officials and observed the working of organizations.

iii. Methodology

The methodology adopted for obtaining data from the department is as under:

- a. Requisition for the relevant record, files, and documents from the department.
- b. Study of different booklets and national and provincial climate change policies.
- c. Discussion with Management
- d. Evaluation of replies, responses and information

1.6 Data Analysis

- i. The audit team analyzed the Climate Change Policy, Framework for implementation of National Climate Change Policy. The focus was to evaluate the implementation status of actions identified in framework for implementation of National Climate Policy.
- ii. The results / observations specific to disaster preparedness and response activities of the organization were derived from the data and information obtained as a result of the above methodology.

Section-II

2. Purpose of Organizations (MoCC, NDMA, PDMA, DDMA)

The structure of disaster management and climate change organizations at National, Provincial and District level is given below: -

a. Ministry of Climate Change

The Ministry of Climate Change was established according to Rule 3(1) of Rules of Business 1973. Ministry of Climate Change is responsible for National Policy, plans strategies and programs with regard to disaster management including environmental protection, preservation, pollution, ecology, forestry, wildlife, biodiversity, climate change and desertification. Coordination, monitoring and implementation of environmental agreements with other countries, international agencies and forums. Policy formulation, coordination and reporting of human settlements including urban water supply, sewerage and drainage.

b. National Disaster Management Authority (NDMA)

The NDMA, under the National Disaster Management Commission (NDMC), is responsible for devising guidelines and implementing programs on DRR, preparedness, capacity building, response, and recovery. During disasters, the NDMA acts as a central hub for implementing, coordinating and monitoring disaster management. They communicate with all stakeholders to facilitate a collaborative response to the disaster (including Disaster Management Authorities, Armed Forces, NGOs, Governmental Ministries and Departments).

c. Provincial Disaster Management Authorities (PDMAs)

The Provincial Disaster Management Authorities (PDMAs) are constituted in the Provinces under the NDM Act (National Disaster Management Act) in 2010. PDMA specializes in mitigation, preparedness and to ensure an organized response to a disaster. PDMA acts as the coordinating authority, which articulates the coordination mechanism between key provincial departments. In case of emergencies, the PDMA works closely with District Governments to organize an initial and subsequent assessment of

disaster-affected areas, and determine the course of action to ensure long-term rehabilitation of the affected population.

d. District Disaster Management Authorities (DDMAs)

The DDMAs, under the District Disaster Management Commission (DDMC), are involved in executing the DRR program at the district and tehsil level (second-lowest tier of local government).

e. Pakistan Meteorological Department

Pakistan Meteorological Department (PMD) is both a scientific and a service department and functions under the Cabinet Secretariat (Aviation Division). PMD is responsible for providing meteorological service throughout Pakistan to wide variety of interest and for numerous public activities and project which require climatic information.

Apart from Meteorology, the department is also extending services in the fields of Hydrology, Earthquake Seismology and Geomagnetism. PMD operates under World Meteorological Organization (WMO) with 198 member states of the world and act as National Meteorological and Hydrological Service of Pakistan. WMO has divided the globe into 8 meteorological region and Pakistan lies in Region #2 known as Regional Association II (RA-II) which includes Asia and Pacific region. Director General PMD is vice president of RA-II and permanent Representative of Pakistan.

f. Federal Flood Commission

The Federal Flood Commission (FFC) is an agency under the Ministry of Water Resources, Government of Pakistan responsible for the development and maintenance of flood protection and control systems in Pakistan

2.1 Legislative Framework of Organizations

The Rules of Business 1973, National Disaster Management Act, National Disaster Management Plan (NDMP), National Disaster Response Plan (NDRP), Disaster Risk Reduction Policy, PDMA Act/Ordinance, PDMA Provincial DM Plan, DDMAs Plan and other policies, procedures and guidelines issued by the entities from time to time have been referred during study.

Section-III

3. Study Findings/Results

3.1 Institutional and Policy Framework of Disaster Risk Reduction

A comprehensive review of the Disaster Risk Reduction (DRR) framework indicated that the governance framework for DRR was not in place as conceived and a number of bodies which required to be established for reducing disaster risk and enhancing resilience against disasters were either not instituted or functioning properly.

As a case study, the following issues related to the governance structure are highlighted:

- Disaster Risk Management Coordination Committee (DRMC) was not established at federal level as per Project Administration Manual (PAM) of NDRMF.
- National Disaster Response Force (NDRF) was not established as required under National Disaster Management (NDM) Act, 2010.
- Building Code Act for making the violation of building codes a criminal offence was not legislated upon.
- Disaster Risk Insurance policy was not formulated and implemented.
- Disaster Risk Financing Strategy was not prepared and approved.
- Provincial Disaster Management Commission (PDMC), Punjab was not established.
- Meetings of Cabinet Committee on Disaster Management, Punjab were not convened.
- Provincial Disaster Management Policy, Punjab was not formulated.
- Provincial Disaster Management draft Plan, Punjab was not approved from PDMC, Punjab.

Management Response

The management of NDMA held that NDMA moved a case for establishment of smart National Disaster Response Force (NDRF) at national level and a number of initiatives were also taken including formulation of a PC-I with the help of World Bank for funding which, after approval in

principle, was revoked by the Planning Commission. A Summary is under submission to the Prime Minister. However, the case was held up due to Covid-19 and merger of ERRA with NDMA.

The management of NDMA further held that NDMC on 21.02.2013 approved the proposal in principle regarding establishment of Disaster Risk Insurance Framework in Pakistan and directed NDMA to continue working on it and bring up the draft policy for consideration by the Cabinet. The NDMA also apprised about its efforts in development of Disaster Risk Insurance Framework (DRIF) in collaboration with different agencies. LEAD (Leadership for Environment and Development) Pakistan, a non-profit organization hosted national workshop on Disaster Risk Insurance Framework for Pakistan, on 8th February, 2017 and the event brought together various National and Provincial stakeholders to enable coordination and synergy in the area. The Final report on Developing Disaster Risk Insurance Framework for Pakistan was shared with all PDMAs, GBDMA and SDMA for their input / comments. SDMA and PDMA Sindh had endorsed the report. However, report could not be finalized as PDMA KP and Punjab had raised objections and no response was received from PDMA Balochistan and GBDMA despite issuing reminders.

The management of NDMA also held that NDMA, in consultation with Pakistan Engineering Council (PEC) has drafted penalty provisions against violation of Building Code and mechanism for Implementation of Building Code of Pakistan (Seismic Provisions). The legislation and implementation of provision regarding building codes is the responsibility of concerned Ministries/development authorities and provincial government. However, NDMA will continue to make efforts to highlight the need for such legislation and its implementation. Furthermore, with the support of NDMA, the SRO was issued on 31.10.2016 for the Fire Safety Code in the existing Building Code of Pakistan. The implementation and enforcement of this bye-law shall vest with the Authority having jurisdiction within their respective jurisdictions and circles.

The management of Ministry of Climate Change, NDRMF, PDMA, Punjab and DDMA Lahore did not provide their responses.

3.2 Non Establishment of climate change section in Planning departments

According to minutes of meeting of “First National Climate Change Policy Implementation Committee” held on 23.04.2015, it was decided that Ministry of Planning Development and Reforms as well as Provincial Planning and Development Departments shall establish a climate change sections in their respective offices.

During the special study it was observed that the climate change sections have not been established in the Ministry of Planning Development and Reforms and in the concerned Provincial Planning and Development Departments.

The implementation framework of National Climate Change Policy requires dedicated efforts by the Federal entities, Provincial Governments and lines Departments and establishment of climate change sections in planning departments is necessary step to implement NCCP across the country.

3.3 Assessment of climate change impacts through Environment Impact Assessment and Initial Environmental Examination

The Second National Climate Change Policy Implementation Committee was held on 24.02.2016. It was decided that Pak EPA and Provincial EPAs should include assessment of climate change impacts while reviewing the Initial Environment Examination and Environmental Impact Assessment of development projects.

During the special study it was found that no relevant data is available with MoCC to ascertain whether climate change impact assessment of development projects is being done through IEE and EIA by the respective EPAs as decided.

In the absence of relevant data with the Ministry of Climate Change the implementation status of the decision could not be determined and no input be provided for research and decision making purposes.

3.4 Evaluation of development projects and development allocation on the basis of National Climate Change Policy (NCCP)

The third meeting of the National Climate Change Policy Implementation Committee was held on 03.04.2017. It was decided that the concept note jointly developed by MoCC and UNDP on climate change will be forwarded to the Ministry of Planning, Development and Reforms for adopting this concept note as criteria for evaluation of projects by both Federal and Provincial governments. Further that all future development allocations should be based on NCCP.

During the special study it was observed that no follow up was made by the Ministry of Climate Change on above decision as no evidence and record was available to ascertain the latest progress on the NCCPIC decision.

3.5 Non preparation of national adaptation plans

According to Para 8 (a) of Climate Change Act 2017 “Function of the Climate Change Authority” shall be to formulate, comprehensive adaptation and mitigation policies, plans, programs, projects and measures designed address the effects of climate change and meet Pakistan’s obligations under interactional conventions and agreements relating to climate change and within the framework of a national climate change policy as may be approved by the Federal Government from time to time.

The scrutiny of record revealed that the MoCC did not prepare / formulate national adaptation Plan.

3.6 Non-functioning of Pakistan Climate Change Council

According to Climate Change Act-2017 Chapter II para 3(1) the Prime Minister shall, by notification in the official Gazette, establish a Council to be known as the Pakistan Climate Change Council consisting of a Chairperson who shall be the Prime Minister or such other person as the Prime Minister may nominate in this behalf.

The Climate Change Council was established vide Senate Secretariat Act No. F. 9(4)/2017-Legis. dated 31.03.2017 and published in Gazette of Pakistan, Extra, on 03.04.2017.

During the special study it was observed that despite lapse of considerable time the Council on Climate Change was not made functional and no meeting of the Climate Change Council was held.

3.7 Non-functional Pakistan Climate Change Authority

According to Climate Change Act, 2017 Chapter III para 5(1) The Prime Minister-in-charge of the Federal Government shall, by notification in the official Gazette, establish the Pakistan Climate Change Authority, here in after referred to as the Authority, to exercise the powers and perform the functions assigned to it under this Act and the rules and regulations made there under.

In addition, the Senate Secretariat passed an Act vide No. F. 9(4)/2017-Legis. dated 31.03.2017 and published in Gazette of Pakistan, Extra, on 03.04.2017, where in it is mentioned that Climate Change Authority will be established.

During the special study it revealed that despite lapse of considerable time the Climate Change Authority was not made functional.

3.8 Non Establishment of Pakistan Climate Change Fund

According to Climate Change Act, 2017 Chapter IV para 12(1,) a fund to be known as the Pakistan Climate Change Fund, hereinafter referred shall be constituted.

The Senate Secretariat passed an act vide No. F. 9(4)/2017-Legis. dated 31.03.2017 and published in Gazette of Pakistan, Extra, on 03.04.2017, where in it is mentioned that Climate Change Fund shall be established.

During the special study it was observed that despite lapse of considerable time the Climate Change Fund was not established.

3.9 Heavy Reliance of PDMA's on NDMA for Technical and Financial Support

Sustainable Development Goal 13 provides that climate change measures may be integrated into national policies, strategies and planning.

After the promulgation of the 18th Amendment, the powers and responsibilities regarding disaster management have been vested with the provinces. NDMA is mandated with policy making and coordination of disaster management activities at federal and provincial levels. Provinces are responsible for well-coordinated response in the wake of any disaster related event.

During the special study it was observed that the lack of technical capacity and financial resources at both federal and provincial levels has resulted in heavy reliance on international relief organizations aid. The federal government remains the major recipient of this technical and financial assistance thus perpetuating technical and resource gap between the provincial DMAs and the NDMA. Whenever any disaster event occurs, PDMA look towards NDMA for technical and financial support.

3.10 Acute Staff Shortage at DDMA level

The target of Sustainable Development Goal 13 provides that education, awareness-raising and human and institutional capacity may be improved on climate change mitigation, adaptation, impact reduction and early warning.

The main functions of NDMA/PDMA are coordination, monitoring and implementation of disaster management plans and policies at national level/provincial level while DDMA are the front line departments for implementing disaster related activities in field.

During the study it was observed that NDMA and PDMA had reasonable staff strength, while there was staff shortage at DDMA level thus compromising disaster preparedness and response capacity of DDMA. This situation has led to inverse pyramid of human resource structure of disaster management in country.

3.11 Non Availability of Disaster Management Information System

The target of Sustainable Development Goal 13 provides that education, awareness raising and human and institutional capacity may be improved on climate change mitigation, adaptation, impact reduction and early warning.

Disaster Management Information System (DMIS) is database for disaster response that provides graphical and real-time information to users in disaster event. DMIS enables disaster management organization to plan and coordinate their relief activities expeditiously in any emergency.

Key components of a database of Disaster Management Information System would be:-

- a. Hazard Assessment Mapping
- b. Vulnerability Assessment
- c. Demographic Distribution
- d. Infrastructure, Lifelines and Critical Facilities
- e. Logistics and Transportation Routes
- f. Human and Material Response Resources
- g. Communication Facilities
- e. Stock management

During the study it was observed that no Disaster management information system exists at national, provincial and districts level resulting in poor response to disasters due to non-availability of essential data. NDMA being the premier disaster management organization needs to develop DMIS for data analysis and effective decision making and make this system available to provinces as well.

3.12 Hazard specific contingency plans

The target of Sustainable Development Goal 13 provides that climate change measures may be integrated into national policies, strategies and planning.

The hazard specific contingency plan outlines the actions of the Provincial Government that will be taken in support of local governments when an extreme temperature event is anticipated or has occurred. The plan also provides guidance for local governments and non-governmental organizations in the preparation of their heat emergency response plans and other related activities.

The plan contains specific actions to be taken by department and different stakeholders. The record analysis showed that no coordination mechanism with line departments was in place. In addition, there is no data available regarding the capacities of respective key line departments in the event of disaster.

3.13 Non Holding of Climate change Policy Implementation Committee meetings

According to Cabinet Secretariat notification No. 9(4)/2010-CC-Dir (PEPC) dated 02.04.2014, National Climate Change Policy Implementation Committee (NCCPIC) was established. The NCCPIC was to meet biannually and will have the following TORs:-

- i) Ensure effective National Climate Change Policy and action plans implementation and to oversee progress.
- ii) Monitoring and upgrading the National Climate Change Policy after five years.
- iii) Reporting the status of the implementation of the Policy based on the inputs of the Provincial Implementation Committees to the Prime Minister’s Committee on Climate Change on a regular basis.

During the course of study, it was observed that meetings of National Climate Change Policy Implementation Committee (NCCPIC) chaired by Federal Minister on Climate Change were held from 2015 to 2019.

The detail of meetings held is as under:

No. of Meeting	Date of meeting	Meeting Chaired by	Members
1st	23.04.2015	Federal Minister of Climate Change	Officials from Federal Ministries / Divisions and representatives from Provincial Governments.
2nd	24.02.2016	Federal Minister of Climate Change	
3rd	03.04.2017	Federal Minister of Climate Change	
4th	11.12.2017	Federal Minister of Climate Change	
5th	17.04.2018	Parliamentary Secretary, MoCC	
6th	17.10.2018	Advisory to PM on Climate Change	
7th	29.04.2019	Additional Secretary, MoCC	

However, no further meeting was held after 2019. Discontinuation of NCCPIC meetings after 2019 shows lack of interest on the part of MoCC and other disaster related organizations.

In the absence of convening regular meeting, the Ministry of Climate Change cannot effectively and efficiently implement National Climate Change Policy.

3.14 Non Formulation of National Action Plan on Climate Change

According to minutes of the 4th meeting of the NCCPIC held on 11.12.2017, MoCC and Provinces were urged to formulate National Action Plan on climate change and MoCC will extend its full support to provinces in the formulation of National Action Plan. .

Similarly as per agenda item No. 2 of the meeting, it was decided that progress of federal ministries and provinces will be finalized on matrix format and reported to the Ministry of Climate Change within one month. Ministry of Climate Change will develop national level plan on the basis of provincial and federal ministries plans and report the progress to Prime Minister Committee on climate change.

During the study it was observed that no progress and follow up was made by MoCC on the above agenda item leading to non-formulation of National Action Plan on Climate Change.

3.15 Multi-Hazard Vulnerability Risk Assessment (MHVRA)

The DRR Policy 2013 requires DRR plans and initiatives to be based upon assessments that identify the nature and degree of vulnerability or risk (including the identification of particularly vulnerable groups), that allow prioritizing problems or geographical areas on a rational basis and that inform the design of appropriate and technically sound DRR interventions. Hazard and Vulnerability Assessments, Risk Assessments and Indices are core tools and processes to identify, diagnose and prioritize risk. According to Table-2 of implementation plan given in PAM for NDRMF, one (01) National level MHVRA and 20 Sub-national MHVRAs were required to be completed by Q2-2018 and Q3-2019 respectively.

It was observed that:

- The National Disaster Management Plan Implementation Road Map 2016-2030 chalks out the phase wise targets for the Multi-Hazard Vulnerability Risk Assessment of entire country to draw the risk atlas upto lowest tier i.e. City (Urban) and Village (Rural) level. NDMA planned to carry out MHVRAs of 39 districts between 2016-18, 55 districts between 2019-22 and 63 districts between 2023-30. NDMA formulated a PC-I titled 'District-Level MHVRA of Pakistan' which is awaiting approval of CDWP since 2019.
- NDRMF released funds for the completion of national level MHVRA and 20 subnational MHVRA on 27.08.2019, which were returned by NDMA without execution of project after lapse of four months.
- PDMA, Punjab through ADB funded project, Flood Emergency Reconstruction and Resilience Project (FERRP), completed MHVRA of 20 districts of Punjab out of 36 districts. These MHVRAs were carried out near river line areas of districts only. Whereas, the industrial and urban centers of the surveyed districts were not covered in the MHVRAs. Further, the PDMP and DDMPs (20 districts) contain exactly same Programs, Projects and Activities (PPAs) options and corresponding indicative costs of all districts. This shows that the PDMP / DDMPs were not based on actual risk assessment of specific geographical conditions of each district and were simply copied on same lines.
- The MHVRAs of the remaining 15 districts of Punjab were not conducted.

Management Response

The matter was discussed with NDMA and the management held that NDMA has given top priority to conduct MHVRA since 2015 but the same could not be completed due to lack of resources. NDMA has completed MHVRA of hazard prone 13 districts. Furthermore, NDMA also developed

and digitized the MHVRA baseline data for 15 districts of Khyber Pakhtunkhwa and Balochistan. The delay in conduct of MHVRA is not on the part of NDMA as NDMA had made hectic efforts for availability of funds.

3.16 Climate Resilient Urban Human Settlement Unit

Para 11(v) of Revised PC-I of ‘Climate Change Urban Human Settlements Unit’ held that delay may lead to various financial and technical funding opportunities, likely to be available to Pakistan by international donors after the adoption of SDG; UN Urban Agenda & Climate Change Action; & impede the achievements of Vision 2025.

A Climate Resilient Urban Human Settlements Unit was to be established under the control of Ministry of Climate Change.

The details related to approval of PC-I and revisions is detailed below:

(Rs. in million)			
Description	Cost / revised Cost of PC-I	Financial Years	Date of Admin Approval
PC-1	56.824	2018-19 to 2022-23	11 th September, 2018
Modified PC-I, Change in financial outlay only. No change in Outputs / Deliverables	59.288	2019-20 to 2023-24	21 st July, 2020
1 st Revision in PC-I. Change in financial outlay only. No change in Outputs / Deliverables	90.158	2019-20 to 2023-24	2 nd August, 2021

Audit observed that:

- i. PC-I to the Project was revised in August, 2021 after lapse of 3 years. The modification / revision of PC-I was only limited to financial outlays of the project. No change was noted in the Outputs / Deliverables of the project / unit.

- ii. Funds were allocated for the project during the FY 2018-19, 2019-20 and 2020-21, however expenditure incurred remained low against the allocated funds as below:

(Rs. in million)

Financial Year	Allocation	Utilization	Savings
2018-19	20.000	0	20.000
2019-20	20.000	1.905	18.095
2020-21	38.788	8.289	30.499

- iii. Non / less utilization of funds shows that the Climate Resilient Urban Human Settlements Unit was not functional.

Audit is of the view that this has resulted into delay in implementation of the project and non-achievement of objectives / outputs / deliverables within the period specified in the PC-I.

3.17 Inclusion of NDMP Priority Action/Program in the Five-Year Plan

Para 10(5) of NDMA Act-2010 states that the Federal Government shall make appropriate provision for financing the measure to be carried out under the national plan. Further, Para 3.3.1 (5) of NDMP provides that the Federal Government shall make appropriate provisions for financing the measures to be carried out under the National Plan.

NDMA in consultation with the Japan International Cooperation Agency (JICA) formulated a project document National Disaster Management Plan (NDMP) for Pakistan and NDMC approved NDMP in its fourth meeting held on 21.02.2013. NDMP consist of certain intervention, strategies and action plan / program to make the Pakistan resilient against disasters. The overall NDMP is a comprehensive plan, having a total investment cost of USD 1,040.9 million.

It was observed that NDMA forwarded its input, containing priority areas for Disaster risk management (along with the tentative cost) to Planning Division for inclusion of NDMP priority action / programs in the 11th Five Year Plan of the country. However, the same was not reflected in the 11th Five Year Plans. Similarly, neither any inputs were requested by Planning Division

nor were those inputs furnished by NDMA for inclusion of the priority action / programs in the 12th Five Year Plan (Pakistan Vision – 2025).

Audit is of the view that non-publishing of NDMA's input in the 11th Five Year Plan and non-inviting the input for the 12th Five Year Plan, implies that disaster risk reduction is on a low priority in the planning paradigm.

Management Response

The management of NDMA held that the inputs for 11th Five-Year Plan were forwarded by NDMA, while NDMA was not consulted for the 12th Five Year Plan by the Planning Commission. Further, Disaster Management is only high on national agenda when a major disaster strikes the country and that too only for disaster response. Bringing DRR on national agenda is continuous process requiring advocacy and awareness efforts.

3.18 National Disaster Management Plan (NDMP) Steering Committee

Para 2 of Annex-H of National Disaster Management Plan Implementation Road Map 2016-2030 provides that NDMP Implementation Steering Committee (SC) shall be established to review and monitor the implementation of NDMP, its priority program's progress and institutional coordination.

During the study, the management provided minutes of meeting of NDMP Implementation Steering Committee dated 7 & 8.01.2016. The scrutiny of minutes of meeting and annual reports of NDMA revealed that:

- i. NDMP Steering committee meeting was held only once on 7 & 8.01.2016 since its constitution on 02.11.2015, whereas as per TOR, NDMP SC was required to carry out NDMP implementation review on quarterly basis.
- ii. NDMA published Annual Progress Reports for the Year 2016, 2017 and 2018. The report for the Year 2016 contained information regarding convening of NDMP (SC) meeting whereas the reports for the Year 2017-18 are silent regarding meetings convened, progress upon NDMP priority programs and actions thereof.

- iii. In its meeting on 7 & 8.01.2016, NDMP (Steering Committee) observed that there is lack of coordination among the Provincial departments and federal organization on flood management. This has resulted in an overlap and repetition of similar activities e.g. flood mapping hazard, hazard risk assessment atlas and NFP-IV etc.

Audit is of the view that non-convening of NDMP Steering Committee meetings shows lack of coordination among the departments at federal and provincial level. The non-publication / disclosure of NDMP implementation review shows that the matter of weak implementation and monitoring could not be brought to the notice of higher authorities.

Management Response

The management of NDMA held that NDMP Steering Committee meetings were not convened. NDMA made concrete efforts for the implementation of the Plan at different forums. The observation of the Audit is well noted and NDMA will plan to establish an effective oversight mechanism for development of revised NDMP and its implementation in the future.

3.19 Formulation of Land use plan and Sectoral & Hazard Specific DRR /DRM Plans

Para 4.2 of DRR Policy 2013 provides that the current policy will be implemented through three main instruments: a) development plans; b) disaster risk reduction/management plans; and c) sectoral and hazard-specific plans. In order to implement specific components of the policy, a range of specific plans and strategic frameworks need to be designed or finalized. Further, Para 4.2.3 of National DRR Policy regarding Sectoral and hazard-specific plans provides that in addition to capitalizing on multi-tier development and DRR/DRM plans, federal ministries/departments and provincial and district line departments will be required to develop sector-specific DRR/DRM plans to be reviewed and updated annually. This approach will allow each public-sector entity to complement and strengthen the overall structure of DRM both horizontally and vertically. NDMA will provide technical assistance in terms of preparing guidelines and imparting technical

skills to government officials for developing sectoral DRR/DRM plans at the national and provincial levels.

During the special study, NDMA was requested to provide specific plans and strategic frameworks for the implementation of the DRR policy. However, strategic frameworks to promote safer and sustainable land-use in a variety of socio- economic, geographic and risk contexts and Sectoral and Hazard Specific Disaster Risk Reduction / Management Plans were not available with the Authority.

Audit is of the view that the non-formulation of land use plan and Sectoral & Hazard specific DRR / DMP has led to non-development of DRR structure and achievement of targets as conceived.

Management Response

The management of NDMA held that the land use planning may only be possible after the completion of micro level MHVRA. NDMA has implemented pilot MHVRA in 13 districts of Pakistan. Now it is possible to develop a land use plan as pilot project in coordination with the respective development authorities and provincial governments. Further, NDMA has secured two (02) projects for land use plan development, i.e. One with UN Habitat and the other with German Government, which were signed by Economic Affairs Division. After implementation of these projects, spatial land use plan for few districts as pilot will be developed.

3.20 Community Based Disaster Risk Management training (CBDRM) and community awareness

According to Sections 16 (2)(h) and 20(u) of NDMA Act-2010, the Provincial Authority may promote general education, awareness and community training and facilitate community training and awareness programs for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations.

During the special study it was observed that Project Implementation Unit – PDMA Punjab formulated 3 documents namely CBDRM Program Punjab Province, CBDRM Trainer’s Guidebook and Participant’s Work Book CBDRM through DCRIP foreign aid project. Further, sufficient guidelines

regarding CBDRM i.e. Trainers Manual and Instructor guidelines on CBDRM were also formulated by the NDMA through foreign consultants i.e. JICA and UNDP etc. PDMA Punjab and DDMA Lahore were requested to provide record to establish that community training and awareness programs for prevention of disaster were undertaken, however no record was available with the authorities.

Audit is of the view that repetitive work regarding formulation of guidelines and manual has been carried out at federal and provincial level and its actual implementation in the shape of execution of CBDRM training program at grass route level could not be initiated.

3.21 In-effective reporting on evaluation of status of actions identified in the implementation framework for National Climate Change Policy

According to 5th meeting of the NCCPIC held on 17.04.2018, Ministry of Climate Change to undertake a comprehensive evaluation of the status of implementation of actions as identified in the Framework for implementation (2014-2030) of NCCP with the support of UNDP.

Ministry of Climate Change accordingly conducted the exercise with the support of UNDP and issued a progress report regarding status of actions identified in implementation framework of NCCP. However, the study of report reveals that report is mere enumeration of projects planned or undertaken concerning climate change. The report has not been able to shed light on status of actions identified in implementation framework of NCCP.

3.22 Non Approval of Sustainable Development Goal No. 13

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call for actions to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

According to National Sustainable Development Goals Frame Work issued on March 2018 by Ministry of PD&R that Parliament of Pakistan adopted sustainable development goals (SDGs) as its own national

development goals in February 2016. Ministry of Planning internalized SDGs in its development framework and embedded SDGs in Pakistan Vision 2025.

During the special study it was observed, it was observed that MoCC formulated two concept papers in line with SDGs Goal 11 & 13. The SDG Goal 11 was got approved and shared with other ministries / line departments on 22.07.2020. Whereas the SDG Goal 13 was not approved from the competent authority as yet.

Audit holds that Government of Pakistan adopted SDGs in February, 2016 and also formulated National Framework on SDGs in March 2018 whereas MoCC formulated concept note on SDG Goal 11 after lapse of 2 years. The concept note on SDG Goal 13 is in process / not yet approved. This shows weak implementation of development framework of Ministry of Planning Development, Reforms and Special Initiatives.

3.23 Non achievement of targets as per SDG Goal 13

According to Concept Note of SDG 13 Climate Action the targets will be contextualized and localized for implementation as detailed below:

Target	Indicator
13.1	Disaster preparedness action plan, Disaster funds, early warning signs framework, National Adaptation Plans, Geographical area specific mapping of disasters and preparedness plans.
13.2	Revision of NCCP (Taking into account SDGs and Paris Agreement), Provincial Action Plans, National Action Plan, Road Map of INDCs, Provincial road Map of INDCs

During the special study, it was observed that MoCC did not achieve progress on the aforementioned targets. The updated status as envisaged in the contextualized indicator and strategic interventions were not provided / formulated.

3.24 Under-staffing in Ministry of Climate Change

Government of Pakistan has signed various international agreement / commitments i.e. SDGs, UNFCCC etc. To fulfill the obligations of the international agreements the availability of staff is very crucial.

During the special study, it was observed that the Ministry of Climate Change is lacking human resource. The skilled human resource is backbone of

every organization to perform the functions and for achievement of targets. Below is the position of sanctioned and vacant posts of MoCC.

Sr. No.	Name of Post	BPS	Sanctioned posts	Vacant Posts
1	I.G Forest	21	1	1
2	Deputy Secretary	19	5	1
3	Conservator	19	1	1
4	DIG Forest	19	2	1
5	Deputy Directors	18	11	5
6	Section Officer	17/18	10	3
7	Admin Officer	16	1	1
8	APS	16	12	2
9	Assistant	15/16	24	1
10	Steno typist	14	21	1
11	UDC	11	5	1
12	LDC	9	13	1
13	Qasid	1-3	4	1
	Total		110	20

3.25 PC-I form with respect to climate change concerns

According to SDG Goal 13 Climate Action and target 13.2 require integration of climate change measures into national policies, strategies and planning.

During the scrutiny of minutes of 6th meeting on NCCPIC held on 29.04.2019, it was decided that Ministry of Planning, Development and Reform will finalize the format of PC-Is to internalize climate assessment aspect in the PC-Is on priority basis. The chair expressed his concern at the meeting that a year had passed since conduct of seminars. It was decided to forward the draft prepared by Ministry of Planning, Development & Reforms to all members of committee for their inputs.

Further, the scrutiny of progress report on NCCP implementation framework in para 2.21, it was mentioned that Planning & Development Division Islamabad in 2019 agreed in principal that all PC-I submitted for approval must incorporate the climate change concerned in the project document. However, formal amendment in the PC-I in this regard is still awaited.

3.26 Duplication of efforts by developing standalone provincial climate change policies

According to 6th minutes of meeting on NCCPIC dated 29.04.2019, Provincial Governments were asked to develop action plans for implementation of NCCP instead of duplication of the efforts by developing standalone provincial policies.

During the study it was observed that despite of the decision of the NCCPIC, the provincial government i.e. KPK and Sindh have developed their own Provincial Climate Change Policies which are in contravention of directions NCCPIC.

3.27 Non-functional District Disaster Management Authorities

According to NDM Act, 2010 District Disaster Management Authorities were to be established.

During special study it was observed that District Disaster Management Authorities (DDMAs) have been notified in accordance with the NDM Act 2010 but a huge resource gap regarding disaster preparedness exists at all district levels. DDMAs lack basic infrastructure and they are not fully equipped to cope with pressing requirements of disaster management. The Federal and Provincial Governments are responsible for making disaster management policies and well-functioning DDMAs are crucial for adequate response in the wake of disaster events.

4. Conclusion

Disaster management is the term often used to describe the systematic process of using administrative decisions, organizational assets and operational skills and capacities of the society and communities to implement policies and strategies to lessen the impact of man-made hazards and related environmental or technological disasters. Thus, disaster management encompasses disaster preparedness through preventive and mitigating measures, emergency response, including relief and early rehabilitation measures, and post-disaster rehabilitation and reconstruction.

The study was conducted to examine the National Climate Change Policy and to prepare a report on the implementation status of actions

identified in implementation framework besides making recommendations with a view to assist the Ministry of Climate Change for implementing the policy measure in order to reduce the risks and impact of future disasters.

The organizations involved in DRR at national and provincial levels like, MOCC, NDMA, NDRMF and PDMA's have a pivotal role in this regard. These organizations are required to improve their governance structures, strengthen internal controls and improve financial management practices in order to achieve their stated objectives and organizational goals.

The Ministry of Climate Change has an essential role in Disaster Risk Reduction as climate change affects disaster risk through increase in weather and climate hazards and by increasing the community's vulnerability to the natural hazards. The Ministry of Climate Change has to adopt a proactive approach and make coordinated and systematic efforts in leading the activities related to reducing disaster risks and achieving climate resilient development in Pakistan.

The findings of the special study indicate that the implementation of Climate Change Policy remains a challenge. The coordination mechanism among disaster management authorities at all levels and as well as line department requires considerable improvements. Resilience, mitigation, adaptation, impact reduction, early warning and adaptive capacity related to natural disasters needs special attention. Further, climate change measures are required to be integrated into policies, strategies and planning at all levels of the government. Moreover, institutional capacity needs to be enhanced at all levels to address natural disaster more effectively and in a timely manner.

5. Recommendations

5.1 Recommendations for Organizations

Recommendations in special study highlighted actions that are expected to improve the performance of the audited entities when implemented. The appropriate and timely implementation of audit recommendations is an important part of realizing the full benefit of the audit activity.

Audit recommendations are as under:

1. The organizations responsible to implement National Climate Change Policy should devise the mechanism to enforce the measure proposed in the action plans.
2. Ministry of Climate Change should ensure convening of regular or biannual meeting on the implementation status of the Climate Change Policy.
3. NDRMF should fast-track its activities to fully utilize the financial resources at its disposal. Concrete efforts should be made to complete the designed activities within the stipulated time schedules as approved by ADB.
4. Provincial Disaster Management Policy should be formulated in Punjab province and got approved from the PDM Commission Punjab to guide disaster risk management mainstream in the province by providing policy strategies that would achieve the long-term goal of reducing disaster risk of precious lives and social, economic and environmental assets of communities
5. Establishment and enforcement of building codes (technical and functional standards) should be ensured by all development authorities and other regulators across the country.
6. Mainstreaming of DRR into Development projects is essential to make the country resilience to disasters. Concrete efforts should be made by concerned agencies to mainstream the DRR into development projects through revision of PC-I & II forms and its proper implementation and monitoring.
7. Mechanism / SoPs should be devised for effective implementation, coordination and monitoring of National Climate Change Policy (NCCP)
8. Climate Change section/wings should be established and made functional in all EPAs and planning departments.
9. It should be ensured that climate change impact has been included while preparing IEE/EIA of development projects.
10. Ministry of Planning Development & Reforms and Special Initiatives as well as Provincial P&D Departments should

priorities and allocate funds on the basis of National Climate Change Policy.

11. Adaption plans, Contingency plans on climate change and disaster management should be prepared on the basis of hazardous surveys.
12. District Disaster Management Authorities should be made functional through provision of due resources in respect of human, financial and proper machinery and equipment.

5.2 Recommendations for Policy Makers

Audit recommends as under:

1. Early warning system related to disaster management required to be properly maintained upgraded and modernized at federal and provincial level across the country.
2. Response mechanism at the lower tiers (district levels) required to be strengthened in the event of disaster.
3. The climate change Policy appears to have not fully factored the 18th Constitutional Amendment as various powers and responsibilities relating to disaster management have moved to the Provinces but the clarity and consensus still remains to be accomplished. Policy makers need to align climate change policy with post 18th amendment scenario.
4. There is not only lack of coordination among Federal and Provincial Governments but also among the different Ministries and Departments, both at the federal and provincial levels. This lack of coordination needs to be removed for effective coordination and efficient mitigation measures of disaster management.
5. The Climate Change Authority required to be made functional as a permanent statutory body for coordination between federal, provincial and local levels.
6. Low budgetary allocation remains one of the major obstacles in the successful implementation of many projects and plans which could mitigate climate change negative effects. Therefore adequate funds should be allocated to climate change and disaster

management organizations for ensuring effective disaster mitigation preparedness.

7. DDMA's/DDMU's should be made functional by providing sufficient human and financial resources so that in case of a disaster, a timely and effective action may be taken.
8. Mass awareness campaigns required to be initiated before start and during monsoon period to create awareness regarding heavy rains, floods and landslides etc. to mitigate the effects of disasters.

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