



# PAKISTAN

## Climate Public Expenditure and Institutional Review (CPEIR)



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# Pakistan - Climate Public Expenditure and Institutional Review (CPEIR)

Working towards a more efficient and effective allocation  
and use of climate change-related finance

**April 2015**

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## FOREWORD

According to the Climate Change Vulnerability Index, Pakistan is amongst the countries that are severely affected by climate change. The Government of Pakistan has recently made efforts to address climate change issues by establishing the Ministry of Climate Change and by promulgating the National Climate Change Policy (2012). Pakistan is signatory to 14 conventions and agreements on environment and climate change. However, efforts, though substantial, do not appear to be commensurate with the climate change challenge as the country has been facing other pressing issues like security, energy and debt management.

The Climate Public Expenditure and Institutional Review (CPEIR), which has been carried out with support from UNDP, is an important milestone in supporting Government efforts to manage climate change. The CPEIR triggers a policy debate on the extent and quantum of efforts to manage climate change and the gaps therein. It is the first attempt in Pakistan to identify expenditures that the government is directly or indirectly making to address climate change. The accompanying institutional assessment is another vital component of the review to understand the context within which climate change is being

addressed and that will need to be undertaken to address the issue effectively. This report is an important step and a start of a long and intensive road in making information related to climate finance more easily available, and trackable.

The Government of Pakistan is strongly committed to taking adaptation and mitigation measures to reduce Pakistan's vulnerability to climate change. The threat requires diverse approaches to adaptation and mitigation, which are further complicated by the variation of challenges in different geographical regions. A Framework for the Implementation of the Climate Change Policy was formulated in 2013 and the government recognizes the need to actually roll out this framework. We are also cognizant of the need to integrate climate change into the wider development agenda; it should emerge as a key message at the policy-making level, as well. Policy-makers and planners will have to set their priorities right and espouse plans that are practical and backed by the required budgetary allocations. The CPEIR is a first step in that direction. We will thus render all-out efforts to integrate climate change into planning and budgeting at different tiers of government.

**SENATOR MUSHAHID ULLAH KHAN**

Federal Minister

Ministry of Climate Change



## SECRETARY'S MESSAGE

This report is an impressive first attempt and a start down a continuous, long and intensive road in accurately calculating Pakistan's climate change-related expenditures. It has achieved the goal of presenting a benchmark of climate change-related expenditures for the Government of Pakistan, which enables a dynamic perspective over the sector-wise policy objectives of climate change expenditures in the next cycles of the Medium-Term Budgetary Framework (MTBF) and budget discussions. A good locus of potential practical use of the climate change expenditure benchmark is the MTBF process and sector allocations within it. The report is also a good attempt at looking into the existing institutional framework that explicitly and/or implicitly governs climate change.

The promulgation of the Climate Change Policy has made a platform available to the Government

for the articulation and alignment of priorities for mitigation and adaptation. The presence of the current scale of climate change-related expenditures and the Climate Change Policy can guide sector priorities and required expenditures in different sectors in the future.

We understand that UNDP Pakistan and the government will work further on climate change-related expenditure classification methodologies to make them more objective. The existing analysis surely serves as an important starting point for comparative analyses of future decisions over climate change expenditures and in laying down recommendations for a sound institutional paradigm for strengthening and mainstreaming climate change.

**ARIF AHMAD KHAN**

Secretary, Ministry of Climate Change

## MESSAGE FROM UNDP PAKISTAN

Climate change is a serious issue across the world and Pakistan figures prominently in the Climate Risk Index developed by Germanwatch and the Maple Croft. UNDP has used financial support from UK Aid to support countries in the region in strengthening the enabling environment required to address climate change. This has been done by working with partner governments to strengthen existing country systems to respond effectively to the impending threat.

The Climate Public Expenditure and Institutional Review (CPEIR) has been conducted by a team of experts under the leadership of the Government of Pakistan, represented in the Advisory Committee. The CPEIR is the first effort of its kind in Pakistan to determine the levels of expenditure being made by the Government on climate change. The results of the study reveal that the investments the Government is making are quite significant, though not sufficient to meet the expanding

challenges of climate change. The Review provides an analysis of the existing policy and institutional setup vis-à-vis climate change, but also delves into an analysis of the current levels of investments and budget allocation of public funds. The CPEIR has been undertaken in over 20 countries in Asia, Africa and Latin America and has proved to be a very useful tool in setting a baseline of climate change expenditures at the country level.

Building on the findings and recommendations of the CPEIR, UNDP will continue to provide support to the Government in responding to climate change challenges by integrating climate change finance into core planning and budgeting systems of the country.

This Review is targeted primarily at policy-makers, but also anyone with an interest in responses to climate change in Pakistan. UNDP Pakistan hopes you will find this a useful and interesting analysis.

**MARC-ANDRÉ FRANÇHE**

Country Director

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## ACRONYMS AND ABBREVIATIONS

A/M	Adaptation/mitigation
AAGR	Average annual growth rate
ADB	Asian Development Bank
ADP	Annual Development Plan
AEC	Atomic Energy Commission
AGP	Accountant General of Pakistan
AJK	Azad Jammu and Kashmir
ANIE	Accrediting National Implementing Entity
APCC	Annual Plan Coordination Committee
ARE	Alternative and Renewable Energy (policy)
BE	Budget estimates
CC	Climate change
CCD	Climate Change Division
CCI	Council of Common Interests
CDM	Clean Development Mechanism (of the UNFCCC)
CDWP	Central Development Working Party
CFF	Climate Fiscal Framework
CGA	Controller General of Accounts
CM	Chief Minister
CO <sub>2</sub>	Carbon dioxide
DDWP	Departmental Development Working Party
DRR	Disaster risk reduction
ECNEC	Executive Committee of the National Economic Council
EIA	Environmental impact assessment
EPA	Environmental Protection Agency
ERRA	Earthquake Reconstruction and Rehabilitation Authority
FATA	Federally Administered Tribal Area
FEG	Framework for Economic Growth
GB	Gilgit-Baltistan
GCF	Green Climate Fund
GCISC	Global Change Impact Studies Centre
GDP	Gross domestic product
GEF	Global Environment Facility
GGI	Green Growth Initiative
GHG	Greenhouse gas
GLOF	Glacial lake outburst flood
GoP	Government of Pakistan
HEC	Higher Education Commission

ILO	International Labour Organization
IMF	International Monetary Fund
IPC	Inter-Provincial Coordination
IPCC	Intergovernmental Panel on Climate Change
IRS	Indus River System
KANA	(Ministry of) Kashmir Affairs and Gilgit-Baltistan (formerly Ministry of Kashmir Affairs and Northern Areas)
KP	Khyber Pakhtunkhwa
KPI	Key performance indicator
M&E	Monitoring and evaluation
MAF	Million acre feet
MCC	Ministry of Climate Change
MDG	Millennium Development Goal
MoF	Ministry of Finance
MoWP	Ministry of Water and Power
MPDR	Ministry of Planning, Development and Reforms
MTBF	Medium-Term Budgetary Framework
MW	Megawatt
NAM	New Accounting Model
NAMA	Nationally-appropriate mitigation action
NAP	National Adaptation Plan
NCCP	National Climate Change Policy
NDMA	National Disaster Management Authority
NDRRP	National Disaster Risk Reduction Policy
NEC	National Economic Council
NEEDS	National Economy and Environment Development Study
NFC	National Finance Commission
NPP	National Power Policy
NSDS	National Sustainable Development Strategy
P&DD	Planning and Development Department
PAC	Public Accounts Committee
PDMA	Provincial Disaster Management Authority
PDWP	Provincial Development Working Party
PEPA	Pakistan Environment Protection Act
PER	Public Expenditure Review (World Bank)
PFI	Pakistan Forestry Institute
PFM	Public financial management
PIFRA	Project for Improvement of Fiscal Reporting and Auditing
PRSP	Poverty Reduction Strategy Paper
PSDP	Public Sector Development Programme
SAFRON	(Ministry of) States and Frontier Regions
SEA	Strategic environmental assessment
SUPARCO	Pakistan Space and Upper Atmosphere Research Commission
TFCC	Task Force on Climate Change
TMA	Tehsil municipal administration
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
WAPDA	Water and Power Development Authority



## EXECUTIVE SUMMARY

Pakistan is assessed to be one of the most vulnerable countries in the world to climate change (CC). Pakistan's extreme vulnerability from CC is understandable owing to its geographic, demographic and diverse climatic conditions. Of particular concern are the CC threats to water, energy and food security due to the inherent arid climate coupled with the high degree of reliance on water from glacial snowmelt. Its impacts are being felt through increasing intensity and frequency of extreme climatic disastrous events, as

well as small, but incremental changes insidiously affecting many sectors of government activity. Globally, the impacts of CC are expected to constrain economic growth and gross domestic product (GDP). Pakistan's high vulnerability means that costs are likely to be relatively high in Pakistan compared to the rest of South Asia where impacts on vulnerable sectors are already predicted to be enormous. Some assessments suggest that Pakistan already faces significant economic losses due to CC.

### THE CPEIR APPROACH

The CPEIR approach determines a CC budget that is aggregated from budget expenditure lines across all relevant Government institutions. The focus of the Pakistan CPEIR was on the federal and one provincial government budget. The budget data was selected from 2010–2014. The analysis has revealed climate-related resource allocation patterns that have never been seen before.

The CPEIR aims to equip Government policy-makers with an evidence base, an assessment of the allocation of public resources (domestic and international) and the institutional setup in place to respond to CC at the country level.

In response to these challenges, the Government of Pakistan (GoP) ratified the National Climate Change Policy (NCCP) in 2012, which aims to ensure that CC is mainstreamed in the economically and socially vulnerable sectors of the economy, and to steer Pakistan towards climate-resilient development. In 2012, the Ministry of Climate Change (MCC) expressed an interest in undertaking a Climate Public Expenditure and Institutional Review (CPEIR) to assess the level at which the GoP has so far been able to respond to the challenges of CC, and to identify opportunities for further strengthening its response.

This section summarizes the CPEIR's findings and recommendations and gives an overview of the policy, institutional, and financial aspects of climate actions. Finally, it gives recommendations for the CC reform agenda in Pakistan. The study includes an assessment at the federal level, as well as in one province, Khyber Pakhtunkhwa (KP).

### A. CC response in Pakistan requires major investment

CC has been recognized in Pakistan as a core component of the economic growth model which is required for growth, poverty reduction and the wellbeing of the population. This is embedded in national economic policies such as the Framework for Economic Growth (FEG), 2011, Vision 2025 and the accompanying Medium-Term Development Plan (2010–2015). The National Strategy for Sustainable Development (developed 2012) also positions CC centrally in the sustainable development trajectory, although the strategy is so far unratified. For instance, Pakistan was ranked number three in the 2012 assessment of the Global Climate Risk Index 2014 with over 6 billion USD-PPP losses due to CC.

The pressing need for more energy and the mitigation of growing greenhouse gas (GHG)

<sup>1</sup> Sönke Kretz and David Eckstein, *Global Climate Risk Index 2014: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2012 and 1993 to 2012*. (Bonn, Germanwatch e.V. German Watch, 2013). German Watch (2014) Global Climate Risk Index, 2014.

emissions in Pakistan both require a substantial investment of over 5 percent of GDP. Ongoing significant national energy shortages have been estimated to require a \$ 5 billion initial investment and annual variable costs of \$ 2.9 billion based on the use of a traditional energy mix (2010 figures). Filling this energy gap with renewable energy has been estimated to cost \$ 10 billion upfront, but with lower annual costs. Investment requirements for mitigation to de-link economic growth from the corresponding GHG emissions increase have been estimated to be the order of \$ 8 billion, annually for a 15 percent GHG reduction, to US 17 billion for a 40 percent reduction. There are significant mitigation possibilities on both the supply- and demand-side with energy conservation measures being most efficient. National adaptation requirements have been estimated to be between 1.5 and 3.0 percent of GDP and there is presently a substantial global shortfall. Although estimates are difficult, the average costs for annual adaptation to CC for Pakistan were estimated to range annually from \$ 6 billion to \$ 14 billion to 2050, or an average \$ 10.7 billion per annum (2010 figures). A comparison of the global cost estimates with the current level of adaptation funding indicates that projected global adaptation needs to be significantly greater than current investment levels, particularly in vulnerable developing countries like Pakistan.

Importantly, the threat of CC requires a 'whole-of-government' approach by including all financial bodies (most notably the Ministry of Finance [MoF] and the Ministry of Planning, Development and Reforms [MPDR]), key delivery sectors (e.g., health and social services, education, agriculture, transport, energy, infrastructure) and all levels of government (e.g., federal, provincial, district). However, with such wide involvement, there is a risk of fragmentation in the CC response. Thus, it is necessary to assess the degree of harmonization and alignment in CC response processes to ensure efficient and effective use of CC resources.

### How much is Pakistan investing currently?

#### a) The federal climate budget

The total federal climate-related expenditure

(development + current budget) was estimated to be between 5.8 and 7.6 percent of total federal expenditures in the four studied years. The relative proportion of the climate-relevant budget spent on adaptation and mitigation varied significantly across studied years; adaptation varied between 25 and 60 percent and mitigation between 30 and 71 percent (combined adaptation and mitigation benefits were a maximum of 11 percent). While the fiscal headroom for climate-related development expenditures is tight, it is nonetheless growing.

The CPEIR illustrated that the number of climate-relevant development projects and the proportion of climate-relevant projects within each government institution vary widely across the studied years, suggesting rather erratic resource allocation and policy delivery. The highest percentage of climate-relevant projects tended to be in the MCC, the Water and Power Division and the Kashmir Affairs and Gilgit-Baltistan Division. In terms of absolute expenditure, between 60 and 80 percent of the total climate-related actual investment expenditure during the four years is split between two ministries; the Ministry of Water and Power (MoWP) (including the Water and Power Development Authority [WAPDA]) and the Cabinet Division (including the Atomic Energy Commission [AEC]). These erratic patterns of CC-related expenditures highlight the need for an overarching CC financing framework which can help streamline budget allocations and ensure a holistic response to CC challenges in the country.

A majority of the expenditure was within the energy sector for mitigation purposes (57 percent, 2013/14 data). Further significant contributions were from the transport category (19 percent, predominantly mitigation), health and social services (9 percent, adaptation), water resources (8 percent, adaptation) and disaster preparedness (5 percent, adaptation). Further detail of the climate budget in the federally administered regions is provided in Box 2.

#### b) The KP provincial climate budget

Following the 18th Amendment to the Constitution leading to devolved functions, KP expenditures jumped 35 percent; the development budget

## CLIMATE BUDGET AND RESPONSE IN FEDERALLY ADMINISTERED REGIONS

The three federal administered regions fall under the responsibility of two federal institutions: the Ministry of Kashmir Affairs and GB—responsible for Azad Jammu and Kashmir (AJK) and Gilgit-Baltistan (GB)—and the Ministry of States and Frontier Regions (SAFRON) (responsible for the Federally Administered Tribal Areas [FATA]). Combined, the regions receive 2–3 percent of the federal budget.

The region with the highest climate-related budget was GB with 20 percent of the total budget. In FATA, the climate budget was 12 percent and in AJK it was 9–14 percent of the total budget. All regions had a greater proportion of climate-related budgets than KP province and the Federal Government.

GB, with the highest regional climate-related budget, was dominated by the Water and Power Department (70–95 percent of total CC expenditure). In AJK, the Transport and Power Departments consistently had the highest absolute climate-related expenditures. In FATA, 85–90 percent of the climate budget was delivered by four departments: Education, Forest, Wildlife and Environment, Works Department and Services and Administration Department. The GB and AJK climate budgets are dominated by infrastructure development, whereas in FATA, the climate budget was more widely spread across a range of sectors.

(Annual Development Plan [ADP]) represents 30–32 percent of the total budget (2010–2014). The fiscal space in the development budget is greater than in the Federal budget, although there is increasing dependence on external resources, mainly through grants (80–91 percent).

Total climate-related spending has increased 88 percent over the last four years (from 2010 to 2014, PKR 13.0 billion to PKR 24.4 billion) which is greater than the increase in total revenues. Climate-related expenditures represent between 10 and 14 percent of the KP development budget and 5.3 and 7.3 percent of the total provincial budget. CC expenditure is common, widely spread and stable across departments in KP. The ADP covers a wide range of sectors and climate-related projects that make up 75–82 percent of development expenditure lines (compared to 47–56 percent at the Federal level). Over half the projects in many government bodies are climate related. The Irrigation and Power Department and Population Welfare Department have the highest departmental proportion of CC expenditure (55–60 percent), whereas the Irrigation and Power and Works and Services Departments have the greatest absolute climate spending.

Nearly three-quarters of the climate activities in KP had an adaptation component. Adaptation is the main KP climate expenditure theme (44 percent climate budget), followed by joint adaptation/mitigation (A/M) (28 percent), supporting activities

(18 percent) and mitigation (10 percent). This is quite different from the Federal situation where over half of the climate budget is pure mitigation. Transport (28 percent of climate budget of ADP), water (20 percent) and awareness raising and education (18 percent) make up about two-thirds of the KP climate budget. The majority of adaption expenditures were mainly in the water, disaster, and health sectors; water resources (45 percent of adaptation budget), disaster preparedness (26 percent), health and social services (19 percent), forestry, vulnerable ecosystems and biodiversity tasks (less than 2 percent, each). Mitigation tasks were dominated by energy (75 percent of mitigation budget), supporting activities were mainly awareness raising (96 percent of supporting budget) and joint adaptation and mitigation tasks were exclusively transport.

The following diagrams summarize the federal and KP provincial CC budget. The first diagram shows the total budget allocation to CC and distribution between adaptation and mitigation. The second diagram illustrates the distribution of CC expenditure across the various NCCP tasks.

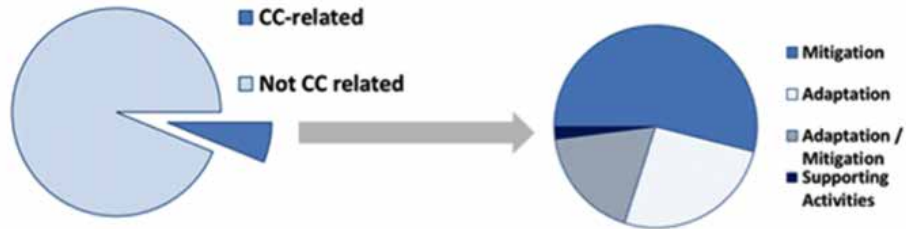
### What is the context in which the CC response in Pakistan takes place?

Pakistan's NCCP, which was approved in 2012, provides an overarching framework for addressing the challenges that Pakistan faces or will face

### The Federal government allocation to climate change:

Climate change expenditures represented 6% of the total (development + current) federal budget in 2013-14:

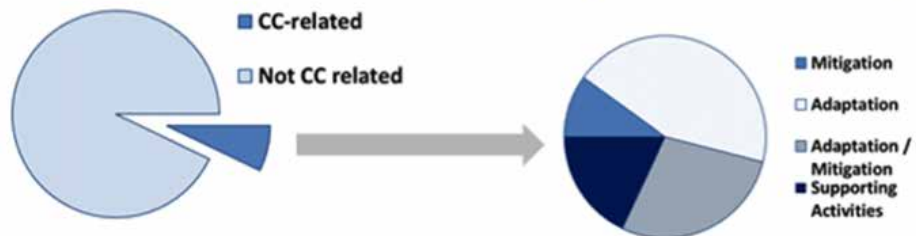
Over half federal climate change expenditures were related to mitigation:



### The Khyber Pakhtunkwa (KP) Province allocation to climate change:

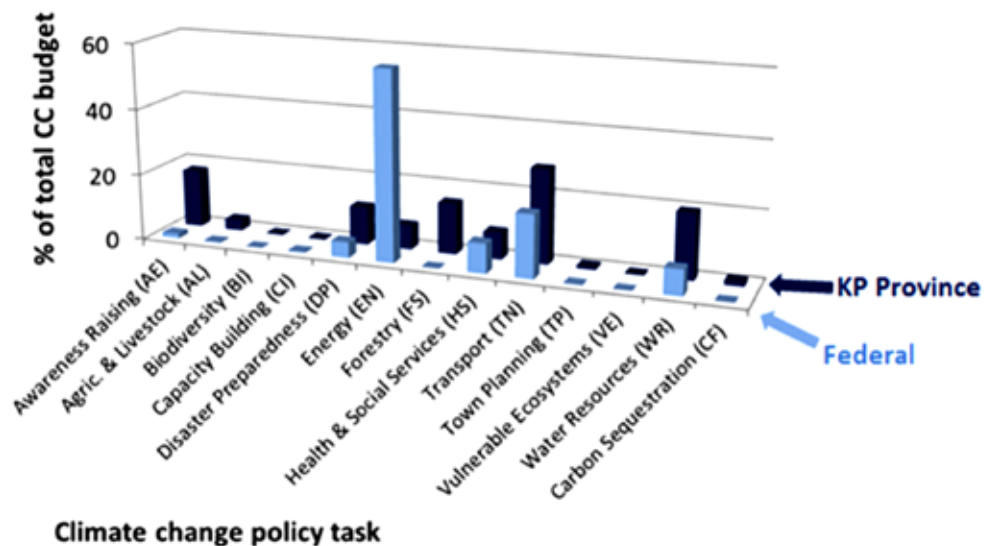
Climate change expenditures represented 7% of the total (development + current) KP budget in 2013-14:

Three quarters of KP climate change expenditure was adaptation and joint adaptation / mitigation:



### Allocation of climate change budget to policy objectives of the National Climate Change Strategy at the Federal and KP Provincial level.

*The Federal government allocation to climate change is dominated by energy and transport whereas KP Province has a more diverse suite of climate-related activities.*



in future due to CC. The policy goal is to ensure that CC is mainstreamed in the economically and socially vulnerable sectors of the economy and to steer Pakistan towards climate-resilient development. The NCCP identifies a number of policy objectives, including the pursuit of sustainable economic growth, pro-poor and gender-sensitive adaptation, economic incentives for adaptation responses and improved inter-ministerial coordination. More specific actions are provided for sectoral approaches to both adaptation and mitigation. The follow-up to the NCCP was the Framework for the Implementation of the Climate Change Policy (of 2013), which outlines the vulnerabilities of various sectors to CC and identifies appropriate adaptation and mitigation actions. This framework document was developed to serve as a catalyst for mainstreaming CC concerns into decision-making at the Federal and provincial levels and to create enabling conditions for integrated climate-compatible development processes. The framework document promotes the preparation of a National Adaptation Plan (NAP), nationally-appropriate mitigation actions (NAMAs), a Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), as well as detailed provincial and local adaptation action plans.

The mainstreaming of CC into sectoral policies is patchy and uptake of the recent NCCP will take time to be fully cycled through the various sectoral policy reviews. In planning terms, CC is firmly positioned within the 'environmental' sector, both in central and devolved administrations, and invariably allied with the well-known Pakistan Environment Protection Act (PEPA), 1997 rather than the NCCP. The linkage between CC and the development sectors is mentioned in higher-level government documents, but has limited traction lower down the Government where it is not prioritized in relation to other competing agendas. However, in 2015, the MCC was reinstated (changing from the Climate Change Division [CCD] as part of the Cabinet Secretariat), suggesting a renewed importance being placed on CC at the highest levels of Government.

At the provincial level, until the 18th Amendment

came into being, there was no development of any CC policy, as the mandate rested at the Federal level. Once it was ratified, the Amendment devolved CC responsibilities (under 'environmental pollution and ecology') to the provincial level. However, pre-devolution Federal responsibilities were maintained to ensure continuity. The climate policy impetus is provided under the Provincial Environmental Protection Act, 2014 with the institutional remit for climate designated to the Climate Change Cell within the Environmental Protection Agency (EPA). The Climate Change Cell is mandated with mainstreaming CC considerations into policies, strategies and actions. The KP Integrated Development Strategy and the KP Growth Green Initiative help link the environmental impact assessment (EIA) process and PC-I (development project proposal form) to CC.

Coupled with substantially devolving CC responsibilities to the provinces, the seventh National Finance Commission (NFC) Award increased the magnitude of financial resources flowing to the provinces, as well as provincial discretion in expenditure. After 2010, provinces were not only expected to be able to set policy objectives and assess CC-related expenditure priorities, but also target interventions with the most cost-effective outcomes. The lack of a coherent institutional setup, policy leadership and capacity in provinces could undermine some of the locally-specific benefits of devolution.

Recognising the need for harmonisation between Federal and provincial undertakings, and ensuring clarity of institutional roles post-devolution, the Council of Common Interests (CCI) was reinvigorated and the Inter-Provincial Coordination Division was established. As CC has not been specifically allocated to the Federation or provinces, and there is an additional need for CC to be harmonized across sectors (e.g., with the National Disaster Management Authority [NDMA]), ensuring progressive clarity in institutional roles and responsibilities remains vital. Planning and budgeting are still two disparate domains because the institutional arrangement remains divided in different agencies. This weak linkage is further fragmented when it comes to crosscutting



issues like CC. Mainstreaming CC across sectors is somewhat limited and may well remain so until there is a clear and agreed mandate on post-18th Amendment roles and responsibilities across the MCC, MoF, MPDR and federal line ministries. Federal-provincial and cross-sectoral clarity in institutional roles and responsibilities in CC is important to move the agenda forward.

### **What is the role of climate-sensitive budgeting?**

CC is not routinely considered in the selection of development expenditures and allocations in Pakistan. There are thus opportunities to increase climate-sensitive budgeting. Financial planning by the sectors for the Medium-Term Budgetary Framework (MTBF) tends to concentrate on their own sector policies and priorities as the main driver for the derivation of planned expenditures. CC is not routinely considered to help development expenditure decision-making by the various budget committees, including the Priorities Committee. The consequence of this is that there is no coherent financial driver for climate-sensitive budgeting in the development budgets of sectors or provinces within the MPDR or MoF.

At the Federal level, with the leadership of the MoF, the medium-term budget process can be strengthened to work towards CC-sensitive budgeting. The ongoing uptake of the MTBF at the Federal and provincial levels offers the possibility for embedding CC-sensitive financial planning. The development of technical criteria to support CC-positive budgeting is necessary to support CC-sensitive prioritization and selection processes and output/outcome monitoring. However, a climate-sensitive MTBF process would reflect the strength of the political message for the need for a substantive CC response. This requires a cross-government approach supported by MoF oversight and technical capacity to determine criteria and indicators. It also requires increased climate awareness in the selection committees and associated political cadres.

Line ministries will need to prioritize and plan for CC-sensitive development projects. For CC to gain traction and be mainstreamed through the

government budget process, selection towards CC-positive projects will be required and supported by the MoF and MPDR. Line ministries will need to clearly appreciate the climate challenges within their sectors, determine a level of priority of CC among competing interests and plan investment submissions appropriately. This can be done within a suitably strengthened MTBF process as the MTBF process sets budget limits from the top-down, but supports bottom-up planning to deliver specified outputs/outcomes.

The MCC has a pivotal position in technical and capacity development to promote climate-sensitive budgeting. It can play a significant role in supporting the MoF and MPDR in enhancing the climate-sensitive budget process within the MTBF. It has the technical expertise to screen the CC sensitivity of proposed development expenditures submitted by the line ministries (in PC-I documents of the MPDR) prior to consideration by the selection committees. It can also help build CC awareness and capacity in the selection committees, such as the Priorities Committee and the Executive Committee of the National Economic Council (ECNEC).

At the provincial level, financial tools such as the MTBF and increased oversight and harmonization could help strengthen the dispersed nature of the KP CC response. The broad allocation of CC-related funds, presently across 19 KP government bodies, coupled with competing priorities, means that some oversight and coordination are required to drive climate-sensitive budgeting forward. In financial terms, the adoption of output-based budgeting under the MTBF can facilitate climate-sensitive budgeting with support from the Planning and Development Department (P&DD) and Finance Department. These financial and oversight roles would be further strengthened by increased clarity of post-devolution CC mandates across the Government Federation.

### **Recommendations for strengthening the climate response**

A number of areas for recommendations for strengthening the CC response have been identified, including in planning and budgeting, in strengthening the institutional framework and

capacity, monitoring and evaluation (M&E) and increasing sensitization to CC. There are myriad possible modes in which to enhance the CC response. However, the CPEIR focuses on those, which in combination, can provide a more efficient and effective allocation to CC and help create an overall coherent CC fiscal framework between the MoF, MPDR, MCC and other involved government bodies. In doing so, the recommendations aim to complement existing governance reforms in the country, such as the introduction and roll-out of output-based budgeting principles in the public financial management (PFM) system. In particular, the recommendations below will enrich the application of output-based budgeting in the CC area by combining policy-, institutional-, capacity- and budgeting-related developments into a single package.

**Integrating CC into the budgetary and planning processes:** The integration of CC into the budget process requires concerted efforts from the MoF, MPDR and MCC. This could include: (a) support for the MoF for the incorporation of CC in the budget, (b) the development of a 'handbook' on CC involvement in PFM, (c) support for the MPDR for the integration of CC in planning process, (d) the development of a CC guidebook for planning departments, (e) extending the CPEIR approach to other provinces and districts, and (f) the development of a Climate Change Financial Framework that will improve the CC policy linkage with budget allocations.

**Strengthening the climate institutional framework:** The institutional setup for CC requires a higher degree of coherence and clarity, especially after the recent devolution process. This could be

achieved through the following interventions: (a) the establishment of a provincial commission, (b) the creation an enabling legal environment for CC, and (c) considering the inclusion of CC criteria in the NFC fiscal transfer formula.

#### **Institutional strengthening of CC-relevant**

**entities:** There is a need for improved harmonization across the various line ministries in the CC response which can be promoted by the MCC. This could involve: (a) strengthening the MCC, (b) providing technical support to KP for CC Action Plan development, (c) developing synergies between different programmes, and (d) establishing a CC committee in Parliament to track climate investments.

**M&E of CC-relevant work:** A system has to be developed which enables the Government and other stakeholders to tap CC expenditures through coding and tracking. Interventions should include: (a) the development of a coding and classification system with the Controller General of Accounts (CGA) and the MoF, and (b) the prioritization of key adaptation and mitigation activities in the MTBF.

**Sensitize policy-makers and the public to the need for CC investment:** CC is not an entrenched phenomenon at the policy and operational level in both governmental and public domains. Achieving this requires: (a) the sensitization of stakeholders to CC and the rationale for CC expenditure, (b) a media strategy for increased CC awareness, (c) the engagement of key ministries and stakeholders with CC institutes in other countries, (d) the development of a knowledge bank and hub, and (e) studies commissioned to support informed policy decisions on CC.





01



# INTRODUCTION

## 1.1 The response to climate change

The most authoritative intergovernmental scientific body on CC, the Intergovernmental Panel on Climate Change (IPCC), declared in its 2014 assessment report that the warming of the climate system was unequivocal. In Pakistan, CC is now a reality and no more a distant-future threat. Its impacts are being felt through the increasing intensity and frequency of disastrous extreme climatic events as well as small, but incremental changes insidiously affecting many sectors of government activity. As noted in the Secretary-General's statement, CC has widespread consequences, affecting livelihoods, security, health and economies, among others.

As such, an effective response to CC must deliver across all sectors including health, social services, education, transport, energy and infrastructure, which requires a 'whole-of-government' approach, involving most government sectors, from the lowest levels to the highest. However, given that CC is a cross-sectoral issue, there is a risk of fragmentation in the response, and subsequently, a difficulty arises in assessing the effectiveness of the totality of response. As financial resources are globally, nationally and provincially becoming more targeted at the array of CC-related activities, it is becoming increasingly useful to assess overall CC responses and reviewing processes and protocols that steer CC-related budgeting and investment. These processes can relate to policy convergence and harmonization across sectors, strengthened prioritization of climate-proofed investments, increased alignment and clarity of roles of key delivery institutions and agencies, and enhanced feedback and assessment of the overall CC response.

An analysis of budget processes, institutions and policy can aid an understanding and identification of key areas in which alignment of these processes

can be achieved. It can also support progression to reduce fragmentation and create a cycle of feedback and progressive improvement. This also strengthens the platform for moving forward to further expanding, targeting and focussing CC investment portfolios, which can help build social, economic and environmental resilience for the future, as well as support climate-resilient economic development, pro-poor and sector-specific goals, such as energy supply and security.

## 1.2 The CPEIR process

An approach called the Climate Public Expenditure and Institutional Review (CPEIR) has been developed to assess the national climate response. This approach has been championed by the United Nations Development Programme (UNDP) through the Bangkok Regional Hub (UNDP-BRH). The CPEIR approach, which builds on the World Bank Public Expenditure Reviews (PERs), aims to equip policy-makers with a tool to analyse the allocation of public resources, both domestic and international. It also allows an analysis of country-level institutional setups to respond to CC. CPEIR's have been conducted in a number of countries in the Asia-Pacific region.<sup>3</sup> These analyses have enabled the identification of areas where CC-responses can be strengthened.

The analysis in the CPEIR methodology identifies and elaborates on a number of areas in which CC-responses may be strengthened such as: (i) supporting the mainstreaming of climate finance by raising awareness of strategies and policy issues, (ii) promoting the efficient and effective use of financial resources, and (iii) assessing policy formulation and implementation, thereby practically contributing to greater cooperation between diverse stakeholders.

These efforts all come under the umbrella of a Climate Fiscal Framework (CFF) which is a

Action on climate change is urgent. The more we delay, the more we will pay in lives and in money<sup>2</sup>.

Ban Ki-moon,  
Secretary-General of  
the United Nations

2. Fiona Harvey, "Ban Ki-moon to join climate change march", The Guardian, 17 September 2014. Available from <http://www.theguardian.com/environment/2014/sep/17/ban-ki-moon-climate-change-march>.

3. These include the People's Republic of Bangladesh, the Kingdom of Cambodia, the Republic of Indonesia, Nepal, the Independent State of Samoa, the Kingdom of Thailand and the Socialist Republic of Viet Nam.

comprehensive, cross-government approach that delivers a coherent and well-managed response to climate finance, involving both the public and private sectors, where practical. CFFs are being developed following CPEIRs in a number of countries in the Asia-Pacific region. They target national resources more effectively and have the potential to attract, and more effectively absorb international climate funds.

The CPEIR involves a review and analysis of three main areas with regard to CC:

**1. Policy:** The scope and comprehensiveness of CC policy at the national and sub-national level, within the sectors, and the degree to which policies are prioritized, costed or sequenced.

**2. Institutions:** The institutional nexus related to CC policy delivery, including the Ministry of Finance (MoF) and the MPDR, and the modes of cross-government synchronization, accountability and decentralization.

**3. Finances:** The proportion of public expenditure relevant to CC and the distribution of it across sectors, the national/sub-national split, and, in some cases, the proportion that is domestically/externally funded.

Using information from these three areas allows a number of recommendations for improvement which include CC policy development and implementation, mainstreaming CC across sectors, focusing on the budget cycle, reducing fragmentation and increasing the strategic focus across the Government, more effective selection and prioritization of climate-proof investments, and enhanced monitoring and evaluation (M&E) of the CC-response. Different countries have accrued different benefits from the CPEIR process. Indeed, while some countries<sup>4</sup> are now moving towards budget tagging/tracking of CC-related expenditures to obtain dynamic and up-to-date information to furnish their CFF, others<sup>5</sup> are further extending this by defining CC-response costs and benefits to move towards a more outcome-orientated, cost-effective response.

### 1.3 CPEIR in Pakistan

A comprehensive and coherent CC response is

necessary, given Pakistan's vulnerability to CC. The request to undertake a CPEIR was expressed by the Government of Pakistan (GoP) in 2012, having heard the experiences of other countries that had undertaken similar processes.

The approach was developed through country missions in 2012 and 2013 and then further refined through workshops and discussions in 2014. Based on their linkages to CC challenges, the key sectors identified to be included in the CPEIR are disaster risk management, agriculture, social sector interventions and water resources management. The CPEIR designed for Pakistan considers federal-level CC-related expenditures—including federally administered areas<sup>6</sup>—as well as provincial expenditures in one province, Khyber Pakhtunkhwa (KP), given the huge implications of the 18th Constitutional Amendment. CC-related expenditures are identified in both the development (investment) and the recurrent budget using financial information straddling devolution from 2010 to 2014.

To ensure that the CPEIR exercise contributes directly to Pakistan's needs, it is guided under the direction of the GoP and addresses real concerns and challenges in the country; the CPEIR team worked under the guidance of an advisory committee. The committee members included the MPDR, the MoF, the Ministry of Agriculture, the Ministry of Inter-Provincial Coordination (IPC), the Ministry of Climate Change (MCC), the KP Ministries of Finance, Environment and Planning and Development, a women-based organization representative from KP and UNDP Pakistan. The committee was inaugurated in the summer of 2014 and its role focused on providing technical- and policy-related advice, reviewing and agreeing on the CPEIR report and providing advice on how recommendations could be implemented and followed-up.

Similar to other participating countries in the region, this CPEIR has the potential to become a benchmark reference that will allow policy-makers to assess the present status of the national and provincial response to CC. This can then inform preparation for the scaling-up of access and delivery of climate finance. More specifically, the aims of the CPEIR are to:

4. e.g. the Republic of the Philippines, the Republic of Indonesia and Nepal.

5. e.g. the Kingdom of Cambodia and the Kingdom of Thailand.

6. Areas with a federally-derived and administered budget rather than a devolved budget like the provinces. They include FATA, GB and AJK.

- Assess current policy priorities and strategies as they relate to CC;
- Review institutional arrangements for promoting the integration of CC policy priorities into budgeting and expenditure management;
- Review the integration of CC objectives within the budgeting process, including budget planning, implementation, expenditure management and financing.
- Recommend opportunities for strengthening the CC-response in terms of policy harmonization and development, financial/ investment planning and budgeting and institutional synchronization and performance.
- Identify practical opportunities for climate investment tracking and creating a streamlined, focussed and effective CFF.

Undertaking a CPEIR at this point in time will be valuable to Pakistan, allowing it to grasp these

opportunities and secure a comprehensive, cross-government approach that delivers a coherent and well-managed CC response.

#### 1.4 CPEIR report structure

The report is targeted at middle- to senior-level policy-makers across all related ministries, but with a particular focus on the MoF, MPDR, and the Ministry of Climate Change (MCC), as well as the Government of KP, particularly, the CC-delivery agencies in the provinces. The report aims to be concise and focussed, with the main conclusions and recommendations clearly and transparently identified. The main body of the report is supported by a number of appendices that provide additional, or more in-depth detail of particular subject areas.

Table 1.1 shows the structure of the report and identifies representative questions that each section addresses.

**Table 1.1: Report structure and representative questions**

Chapter	Chapter title and indicative questions
2	<b>Threats and cost of CC</b> <ul style="list-style-type: none"> <li>• Where are the main threats of CC?</li> <li>• What are the likely impacts of CC?</li> <li>• How will this create more vulnerable communities, economies and environments?</li> <li>• What will be the economic cost of CC?</li> </ul>
3	<b>CC policy</b> <ul style="list-style-type: none"> <li>• What has been the national policy process for CC?</li> <li>• What has been the effect of the 18th Amendment on the climate response?</li> <li>• What are the policy objectives and implementation framework of the National Climate Change Policy (NCCP)?</li> <li>• How is CC addressed in sectoral policy?</li> </ul>
4	<b>CC and the budget process</b> <ul style="list-style-type: none"> <li>• How does the public financial management (PFM) system include CC?</li> <li>• How is the allocation of funds determined for the Public Sector Development Programme (PSDP)?</li> <li>• What are the key stages in the PSDP process that can support a strengthened CC response?</li> </ul>
5	<b>Methodology for determining a climate budget</b> <ul style="list-style-type: none"> <li>• How can a climate budget be determined?</li> <li>• How are CC-related expenditures identified?</li> <li>• How can CC-related investments be categorized?</li> </ul>
6	<b>CC budgeting and institutional assessment – federal level</b> <ul style="list-style-type: none"> <li>• What is the federal expenditure on CC?</li> <li>• What is the distribution of this allocation across ministries and sectors?</li> <li>• Are the main expenditure areas linked to climate-related vulnerabilities?</li> </ul>
7	<b>CC budgeting and institutional assessment – provincial level</b> <ul style="list-style-type: none"> <li>• What is the provincial expenditure on CC?</li> <li>• What is the distribution of this allocation across provincial departments and sectors?</li> <li>• Are the main expenditure areas linked to climate-related vulnerabilities?</li> </ul>
8	<b>CC budgeting and institutional assessment – federally administered regions</b> <ul style="list-style-type: none"> <li>• What is the regional expenditure on CC?</li> <li>• What is the distribution of this allocation across regions and sectors?</li> <li>• Are the main expenditure areas linked to climate-related vulnerabilities?</li> </ul>
9	<b>Conclusions and recommendations</b> <ul style="list-style-type: none"> <li>• What are the main points of access for strengthening the CC response?</li> <li>• What short- and medium-term actions could enhance response effectiveness?</li> <li>• What steps are necessary to move towards a comprehensive CFF?</li> </ul>





02

# THE THREATS AND COSTS OF CC

## 2.1 INTRODUCTION

Under the auspices of the United Nations, the IPCC is the most authoritative intergovernmental scientific body on CC. Its job is to review and assess recent scientific, technical and socioeconomic information and form a clear scientific assessment on the current state of knowledge in CC and its potential impacts<sup>7</sup>. Its fifth assessment report (2014) declared that the warming of the climate system was unequivocal; land and ocean average surface temperature data show a warming of 0.85°C from 1880 to 2012. The report identifies significant and globally widespread changes in environmental processes, extreme events and natural resources that have already affected social and economic development.

The experts have formed a consensus behind the manmade nature of CC and the significance of the threat it poses. The fifth assessment report stated, for the first time, that CC, combined with poverty and climate-induced economic shocks, could lead to wars and mass migration.

## 2.2 CC VULNERABILITY

CC is now a reality for Pakistan. Its impacts are being felt in the shape of increasing intensity and frequency of disastrous extreme climatic events. In addition, small but incremental changes are affecting sectors such as water, agriculture, biodiversity, human health and forestry and vulnerable ecosystems. Accurately defining the extent of Pakistan's CC vulnerability is difficult as there is currently little detailed knowledge on the exact nature and possible extent of the impacts, due to the absence of comprehensive vulnerability assessments in Pakistan<sup>8</sup>.

Most international CC vulnerability indices (e.g., Maple Croft and Germanwatch) have categorized Pakistan among the countries facing extreme risk from CC impacts. For instance, Pakistan was ranked number three in the 2012 assessment of the Global Climate Risk Index, 2014<sup>9</sup> with over \$ 6 billion (PPP) in losses due to CC. These vulnerability indices are based on an assessment of the country's exposure to climate-related natural disasters, population sensitivity and exposure and adaptive capacity to combat CC. Pakistan's extreme vulnerability to CC is understandable, owing to its geographic, demographic and diverse climatic conditions. It lies in a geographic region where temperature increase is projected to be higher than the global average. The NCCP<sup>10</sup> identified the following major CC threats:

- Considerable increases in the frequency and intensity of extreme weather events coupled with erratic monsoon rains, causing frequent and intense floods and droughts;
- Projected recession of the Hindu Kush, Karakoram and Himalayan glaciers due to global warming and carbon soot deposits from trans-boundary pollution sources, threatening water inflows into the Indus River System (IRS);
- Increased siltation of major dams caused by more frequent and intense floods;
- Rising temperatures resulting in enhanced heat and water-stressed conditions, particularly in arid and semi-arid regions, leading to reduced agricultural productivity;
- Further decreases in the already scanty forest cover from rapid change in climatic conditions to allow natural migration of adversely-affected plant species;

7. Core Writing Team, Rajendra K. Pachauri and Leo Meyer, eds., *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva, Intergovernmental Panel on Climate Change [IPCC], 2014).

8. Jo-Ellen Parry, Marius Keller and Deborah Murphy, *Identifying Priority Adaptation Actions in Pakistan: A Situational Analysis*. (Manitoba, International Institute for Sustainable Development [IISD], 2013).

9. Sönke Kreft and David Eckstein, *Global Climate Risk Index 2014: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2012 and 1993 to 2012*. (Bonn, Germanwatch e.V. German Watch, 2013).

10. NCCP, 2012.

- Increased intrusion of saline water in the Indus delta, adversely affecting coastal agriculture, mangroves and the fish breeding grounds;
- Threat to coastal areas due to projected sea level rise and increased cyclonic activity due to higher sea surface temperatures;
- Increased stress between upper and lower river catchments in relation to water resource sharing;
- Increased health risks and CC-induced migration.

Of particular concern is the CC threat to the water sector due to the country's arid climate and its reliance on water from glaciers and snowmelt. Pakistan receives around 50 million acre feet (MAF) of water from annual rainfall, whereas the IRS receives around 141 MAF largely from glaciers and snowmelt. The country's rainfall is generally low and irregular with an annual average of 278 mm, varying from around 440 mm in wet years (e.g., 1994) to 160 mm in dry years (e.g., 2002). The country's spatial rainfall variation is also very high, ranging from around 1,500 mm annually in upper parts to 100 mm in southern parts of the country. It is expected that monsoon and winter rainfall variability will increase further because of CC, and consequently increase present water-stressed conditions in the country.

Glacial melt in the Himalayas is expected to increase the flooding of the Indus River and its tributaries over the next two to three decades, which will be followed by decreased river flows as the glaciers recede<sup>11</sup> (IPCC 2007). The increased flow, in combination with predicted flashy rainfall, will result in frequent floods unless reservoir capacity is increased. River flows are expected

to decrease after a few decades due to reduced glacier mass to a level that would be determined by precipitation input at the time<sup>12</sup>.

According to the World Bank report (2006), 'Pakistan's Water Economy: Running Dry', the western Himalayan glaciers will retreat for the next 50 years, causing an increase in Indus River flows. This will result in decreases of 30–40 percent in river flows in the Indus Basin<sup>13</sup>. A study by the Global Change Impact Studies Centre (GCISC) shows that if the average temperature in the Indus watershed were to rise by 3°C and the Himalayan glaciers were to shrink to half their present size, the overall annual flow would decrease by about 15 percent and the monthly flow pattern would change considerably, with more water coming in spring and early summer, and less water in the later part of summer<sup>14</sup>. Furthermore, elevated temperatures can cause higher evaporation and increased irrigation water demand. Such scenarios can have very serious consequences for Pakistan's water resources and associated industries and livelihoods. This includes cotton, which is grown mainly along the Indus valley and is susceptible to flooding and drought<sup>15</sup>.

Under the influence of these projected CC threats, water, energy and food security are to become increasingly stressed, and in some areas, can even lead to existential concerns over livelihoods, and even survival. CC threats are likely to cause environmental, social and/or economic impacts in most sectors. This is especially the case in the agricultural and livestock sectors which contribute 21.4 percent of GDP (Economic Survey 2012/13). Box 3 shows a case study that exemplifies the increasing environmental, social and economic pressures on these vulnerable sectors<sup>16</sup>.

11. Core Writing Team, Rajendra K. Pachauri and A. Reisinger, eds., *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva, Intergovernmental Panel on Climate Change [IPCC], 2007).

12. Pakistan, Ministry of Planning, Development and Reforms, *Final Report of the Task Force on Climate Change* (Islamabad, 2010).

13. John Brisco and Usman Qamar, *Pakistan's Water Economy: Running Dry*. (Karachi, Oxford University Press, 2006).

14. Ghazanfar Ali, Shabeh ul Hasson and Arshad M Khan, *Climate Change: Implications and Adaptation of Water Resources in Pakistan*. (Islamabad, Global Change Impact Studies Centre [GCISC], 2009).

15. Duncan Burnett, *Final Report: Stage 2 - Supporting Climate Resilient Value Chains*. London, DFID, 2013).

16. Ibid.



## CC AND COTTON PRODUCTION - ENVIRONMENTAL EFFECTS, SOCIOECONOMIC CONSEQUENCES AND INSTITUTIONAL REFORM

Pakistan is the world's fourth-largest cotton producer and the sector employs approximately 15 million people. Punjab accounts for 79 percent of total production, followed by Sindh at 20 percent.

The Indus River is very important to cotton agriculture; cotton production already takes place in suboptimal conditions (high temperatures). Further increases in temperature and changes in rainfall will increase net irrigation water requirements, resulting in greater reliance on poor-quality groundwater. This in turn would induce secondary salination.

The present climate and projections all suggest increasing challenges for the sector. These include heat stress and reduced soil moisture, leading to reduced yields and quality (boll size). Pest/disease incidence and soil salination are also very real concerns.

The consequences of these challenges are likely to lead to the commercial non-viability of cotton in certain areas (especially away from the Indus River and in some tributaries) and the loss of the livelihoods for large numbers of agricultural workers.

Some 24 percent of Pakistan's land area is cultivated of which 80 percent is irrigated by water flowing predominantly through glacier-fed rivers; it possesses the world's largest contiguous irrigation system. The staple wheat and rice crops are sensitive to changes in temperature, rainfall, irrigation water availability, and atmospheric carbon dioxide (CO<sub>2</sub>) levels. Pakistan's climate can vary from sub-zero temperatures in the north to around 50°C in the south. CC will thus be manifested through varied impacts on the crops. The GCISC examined the impact of changing climatic parameters on wheat, indicating a 6 percent decrease in production by 2085. A similar study on rice predicted a 6 percent production decline for each degree Celsius increase in temperature. Being an agriculture-based economy, these scenarios will have serious consequences for Pakistan's food security and the livelihoods of agricultural workers.

### 2.3 CONTRIBUTIONS TO GHG EMISSIONS

Pakistan is among the lowest GHG emitters globally, as per the US Department of Energy's Carbon Information Analysis<sup>17</sup>. Pakistan's contribution to total global GHG emissions is around 0.8 percent, which is 1.9 tonnes on a

per-capita basis (ranked 135th in a global list of countries). This represents one-third of the world average.

Pakistan's total GHG emissions in 2008 amounted to 309 million tonnes of CO<sub>2</sub>. The largest contributor is the energy sector (50 percent share), followed by the agricultural sector (39 percent share), industrial processes (6 percent share) and other activities (5 percent share). In 1994, Pakistan's total GHG emissions were 182 million tonnes of CO<sub>2</sub> equivalent and rose 3.4 percent, annually<sup>18</sup>.

Pakistan's projected GHG emissions over the next four decades under a business-as-usual scenario suggest that total GHG emissions will more than double by 2020 (compared to 2008 emissions) and increase nearly 14 fold by 2050. This projection is based on assumptions that the elasticity of GHG emissions relative to GDP will remain essentially the same as what they were during 1994–2008<sup>19</sup> (Task Force on Climate Change [TFCC], page 8), and would be in line with projected economic growth. Projections of the energy mix suggest that the share of renewable and nuclear energy will rise by 2030, moving away from oil and gas. However, the share of carbon-intensive coal will rise rapidly in the timeframe leading to 2030 to 19 percent, or in absolute terms, a 16-fold rise from 2005.

17 Carbon Dioxide Information Analysis Center, "Carbon dioxide information analysis center", 8 May 2015. Available from <http://cdiac.ornl.gov/>.

18. Pakistan, Ministry of Planning, Development and Reforms, Final Report of the Task Force on Climate Change (Islamabad, 2010).

19. Ibid.

## 2.4 ECONOMIC IMPACT OF CC

CC and natural resource degradation are forecast to result in significant economic costs. The IPCC's fifth assessment report suggests that GDP growth will be 0.2 to 2.0 percent lower once global temperatures have risen by 2°C<sup>20</sup>. However, these estimates need to be used cautiously as they are dependent on assumptions about discount rates and equity, etc. However, the broader literature on the economics of mitigation suggests that reducing GHG emissions to acceptable levels can be achieved without significantly undermining growth objectives. According to a World Bank study, the degradation of natural resources may also have a significant impact on future growth. The study suggested water quality would suffer, leading to a reduction of 0.8 percent of GDP, pollution 3 percent of GDP, and farmland 1.8 percent of GDP<sup>21</sup>.

Initial findings of a 2014 Asian Development Bank (ADB) study<sup>22</sup> on the economics of CC in South Asia indicate that the total cost of CC will increase over time, and in the long term, be prohibitively high. It states that "...even under optimistic climate change scenarios, huge impacts are likely on vulnerable sectors across South Asia, resulting in significant losses in gross domestic product (GDP) and, hence, in economic growth and poverty reduction". The key sectors, which according to the report are expected to suffer economic losses, include water, agriculture, energy, health, transport, water and coastal and marine resources.

As far as Pakistan is concerned, these sectors are important both socially and economically, and CC impacts are increasingly observable. With a business-as-usual scenario, South Asia could suffer an economic loss equivalent to 1.8 percent of its GDP by 2050, and it will increase progressively to 8.8 percent of annual GDP<sup>23</sup> by 2100. However, if suitable mitigation actions are taken by the global community along the Copenhagen–Cancun

agreements to limit the global mean temperature increase to below 2°C, South Asia would suffer an average loss of 1.3 percent of GDP by 2050 and around 2.5 percent by 2100.

The ADB study suggests that investment in adaptation in South Asia will need to be 0.46 percent of GDP by 2050 and 0.86 percent by 2100 to offset CC impacts (assuming no mitigation). With mitigation, the costs of adaptation decrease broadly in line with the reduction in CC impacts caused by mitigation of GHG emissions, though with regional variations.

## 2.5 COSTS OF RESPONDING TO CLIMATE CHANGE

There is presently no standard, internationally well-accepted methodology to estimate CC adaptation and mitigation costs. To overcome these limitations, the UNDP National Economy and Environment Development Study (NEEDS), 2011<sup>24</sup> used different methods to calculate the average cost of adaptation and mitigation in Pakistan.

### 2.5.1 Mitigation costs

The options for mitigating CC are vast in the energy sector, on both the demand and supply sides. The demand side options focus on the transport, residential and industrial sectors and the supply side options focus on shifts in the fuel mix—renewable energy promotion—and efficiency enhancements.

Pakistan has one of the highest rates of transmission and distribution losses in the world. The non-productive domestic/residential sector (42.15 percent) is responsible for more electricity consumption than either the industrial (23.92 percent) or agricultural sector (14.03 percent). There is also considerable potential for energy conservation in Pakistan as a mitigation option. Promoting energy saving and energy efficiency may be the cheapest option, being in the order of

20. Core Writing Team, Rajendra K. Pachauri and Leo Meyer, eds., *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva, Intergovernmental Panel on Climate Change [IPCC], 2014).

21. World Bank, 2013.

22. Mahfuz Ahmed and Suphachol Suphachalasai, *Assessing the Costs of Climate Change and Adaptation in South Asia*. (Manila, Asian Development Bank [ADB], 2014).

23. Ibid.

24. Malik Amin Aslam Khan, Pervaiz Amir, Shakeel Ahmad Ramay, Zuhair Munawar and Vaqar Ahmad, "National economic and environmental development study (NEEDS)", Report (Islamabad, Ministry of Environment, 2011). Available from <https://unfccc.int/files/adaptation/application/pdf/pakistanneeds.pdf>.





\$ 1–3 per unit electricity saved compared to small hydropower schemes (\$ 5–7 per unit electricity generated), wind (\$ 12) and solar (\$ 21)<sup>25</sup>. However, mitigation in the energy sector should include energy saving and efficiency, as well as improving grid robustness, transmission efficiency and increased low-carbon electricity generation.

Based on a business-as-usual scenario, GDP growth between 4.7 percent (2011–2015) and 7.1 percent (2041–2050), annual energy growth between 3.7 percent and 5.7 percent, and a shift towards coal in line with projections, GHG emissions will rise from 347 million to 4,621 million tonnes of CO<sub>2</sub> equivalent during the period 2011–2050.

The NEEDS (study)<sup>26</sup> estimated the country's mitigation investment requirements for delinking its economic growth from the corresponding emissions increase (i.e. predicating further growth on a lower amount of GHG emissions than the present). From now until 2050, the annual mitigation investment costs would range from around \$ 8 billion (undiscounted 2010 \$) for a 15-percent GHG emissions reduction to \$ 17 billion for a 40 percent reduction.

More pressing needs are related to filling the significant energy gap that cost the country \$ 6 billion in 2008 and 2 percent of GDP in 2009/10. The energy gap is estimated to be in the region of 2,500–5,000 megawatts (MW). To fill this gap with coal would cost \$ 5 billion (2010 estimate) in initial investments and then annual variable costs of \$ 2.9 billion. However, filling this gap with renewable energy would cost an estimated \$ 10 billion in initial fixed costs, though far lower annual variable costs. The licensing of renewable energy through private investment into a more deregulated and accessible energy market would offset the high initial costs; a model used by many developing and developed countries. However, ensuring substantial inward investment requires the creation of a legal and policy framework, fiscal instruments and tariffs to pay the energy generators for their electricity (e.g., 'feed-in-tariffs' per unit electrify supplied to the grid).

### 2.5.2 Adaptation costs

The NEEDS (study) used three different criteria for deriving reasonable adaptation cost estimates for Pakistan<sup>27</sup>. These were based on overall projected GDP, derivations on a per-capita basis based on existing research and estimates from the cost of historical climatic disaster events. Average annual adaptation costs were estimated to range from 3 percent of GDP by 2015 to 1.5 percent of GDP by 2050. That represents, from now to 2050, around \$ 6 billion–\$ 14 billion, or an average \$ 10.70 billion per annum over the next 40 years.

For global adaptation, cost estimates are substantially greater than current adaptation funding and investment, particularly in developing countries. This suggests a funding gap and a growing adaptation deficit. The most recent global adaptation cost estimates suggest a range from \$ 70 billion to \$ 100 billion per year, globally by 2050<sup>28</sup>. Comparison of the global cost estimates with the current level of adaptation funding indicates that global funding needs to be orders of magnitude greater than what it is today, especially in vulnerable developing countries like Pakistan.

### 2.5.3 Directing climate response expenditure

Following a lower GHG emissions route may costs approximately \$ 8 billion–17 billion, annually and undertaking adequate adaptation actions, in the order of \$ 6 billion–14 billion. This suggests that the climate response would cost in the region of \$ 14 billion–\$ 31 billion annually, or 6–13 percent of GDP, annually (based on 2013 GDP of \$ 237 billion). For Pakistan, with its significant vulnerabilities, an existing energy gap and growing energy demand, there remains a vital debate on the formulation and extent of the CC response. Government commitment, through its budget setting and policy objectives, will be the prime mover in the CC response; private sector involvement will be required at a later stage. However, there are a number of key questions to answer in order to formulate the response, which the CPEIR can help address:

28. Muyeye Chambwera, Geoffrey Heal and Others, "Economics of adaptation", in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, C.B. Field and Others. (Cambridge, Cambridge University Press, 2014).

**How much should be spent on the climate response?** Present spending on the climate response across the Government is unknown. The timeline and targets to achieve reductions in vulnerability, increasing resilience for adaptation and reductions in GHG emissions for mitigation are not clear. No substantive and comprehensive outcomes-monitoring for mitigation and adaptation interventions is carried out to help determine the extent of CC policy delivery. It is clear that there are significant climate-related vulnerabilities which are having social, economic and environmental effects. However, it is not clear what the scale of the adaptation deficit is in social and economic terms.

**What should be the investment balance between adaptation and mitigation?** It would be possible to focus the CC response on securing vulnerable livelihoods and assets which are under direct CC threat through adaptation and building resilience. However, to move toward a low-carbon path through mitigation actions and develop the green economy is likely to strengthen economic growth and help absorb CC response costs; although the GHG reductions achieved will be small on a global scale due to Pakistan's low GHG contribution. Deciding on the balance between adaptation and mitigation affects the allocation of government expenditure across institutions and activities; the CPEIR addresses this question and provides an overview of the balance between adaptation and mitigation expenditures.

**Are government investments causing increased CC pressures?** To what extent are positive climate investments being counteracted by negative climate expenditures, especially through counter-mitigation policies and financial instruments? Reforming environmentally-harmful subsidies, and specifically inefficient fossil fuel subsidies, is necessary to establish policy frameworks that "get the prices right" to reduce GHG emissions<sup>29</sup>. Phasing out subsidies is politically challenging, and can in some cases have negative impacts on low-income households and thus must be implemented carefully to ensure that any negative impacts on household affordability are mitigated through appropriate measures.

**How does the CC response link to the overall development path of the country?** Both adaptation and mitigation responses need to be coherent and in-line with the development agenda, nationally and provincially. How can the national climate response be best formulated to support the development agenda and key documents such as the FEG, 2013, which emphasizes the need for steady and sustained growth through competitiveness, productivity and innovation? Ensuring that national efforts towards a climate response are concomitant and supportive of the outlined trajectories for sustainable economic growth and societal wellbeing, requires a review of the constituent parts of the CC response, as well as an overall strategic positioning of the response alongside the development agenda. The CPEIR can help to establish the positioning of CC within this socioeconomic development trajectory and recommend further harmonization and integration.

## 2.6 FINDINGS AND CONCLUSIONS

- Pakistan is already experiencing CC effects with an estimated \$ 6 billion in losses in 2012. Evidence suggests that CC will have a significant and increasing effect on national GDP if no action is taken. Combating these effects requires action on both mitigation (reduction of GHG emissions) and adaptation (building resilience in natural and human systems).
- Economic studies have assessed the costs of mitigation to decouple economic growth from GHG emission increases, and for building adequate resilience through adaptation. In Pakistan, these estimates are in the region of 5.5 percent of GDP, annually for mitigation and 1.5–3.0 percent of GDP, annually for adaptation.
- With significant financial resources required for a CC response, there is a need to link expenditures to the overall development path of the country, to determine the balance in spending between adaptation and mitigation, and to determine the prioritization and selection of adaptation and mitigation activities.

29. Organisation for Economic Co-operation and Development (OECD), "Financing climate change action", Undated. Available from <http://www.oecd.org/env/cc/49096643.pdf>.





03



# CLIMATE CHANGE POLICY AND INSTITUTIONAL SETUP

## 3.1 INTRODUCTION TO CLIMATE CHANGE POLICY AND INSTITUTIONS

The FEG, 2011 from the MPDR sets a treatise that sustained steady growth is the only option to reduce poverty and enhance citizens' wellbeing. The role of CC in this growth model is recognized. There is a section on environment and CC within the FEG that proposes to:

- (i) Protect economic growth from the risk and associated economic cost of climate-induced natural disasters by mainstreaming risk reduction and management concerns within the Government's planning processes;
- (ii) 'Climate proof' economic growth from the impacts of CC, paying particular attention to the agricultural, water and energy sectors;
- (iii) Promote 'green growth' by attracting investment in low-carbon technologies. CC has thus been recognized as a core component of the growth model. This is reinforced in the Pakistan Vision 2025 which was designed to represent an aspirational and critical signpost for an effective strategy and roadmap to reach national goals.

Delivering economic growth in a period of changing climate requires the policy setting and formulation of a governmental institutional setup that can deliver these policy objectives. Pakistan has been making both policy and institutional arrangements, i.e. the development of a national policy for CC (in 2012) and the establishment of the MCC in 2015. However, CC is a crosscutting issue that cannot be addressed by a single ministry. Rather, it needs to be resourced and mainstreamed across many of the sectoral line ministries at both the federal and provincial level. This has connotations for the required leadership and oversight role of the MCC and in the technical

and institutional mainstreaming requirements of the line ministries. In addition, the way in which resources are prioritized and allocated through the MoF and MPDR is critical to a successful embedding of CC across Government.

However, present policy and institutional developments have not yet resulted in CC becoming a fundamental part of the policy debate, despite references to its significance in documents such as Vision 2015 and the FEG. It is still falling short of being accepted as a crosscutting theme across sectors and ministries, and as such, does not distinctly figure in the planning and budgetary paradigm of different ministries. A remaining challenge is that there is often no distinction made between 'climate change' and 'environment'. This is illustrated by the fact that many stakeholders still refer to the PEPA, rather than the NCCP as a guiding document.

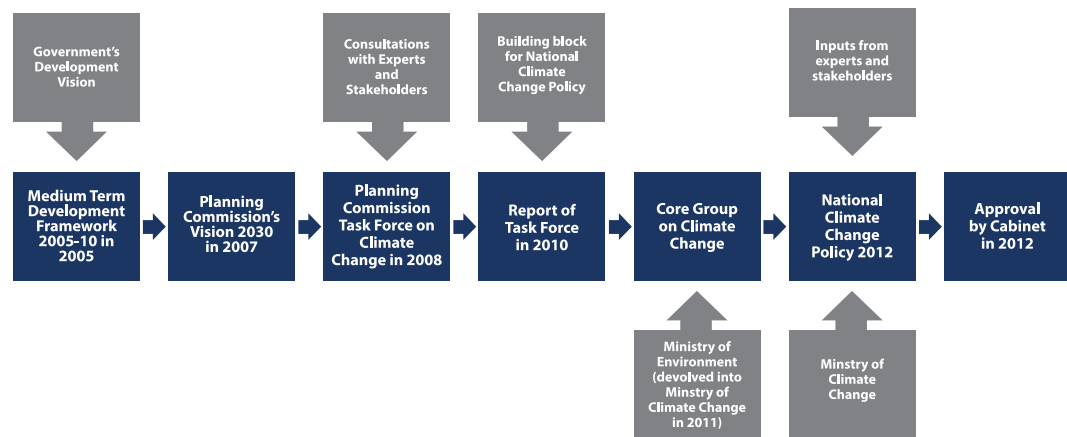
This chapter first considers the development of the NCCP and the associated Framework for Implementation which sets the contemporary policy platform for CC. The way in which the CC policy links into sectors is then considered, and the strengths and challenges of the present policy nexus are finally assessed. The second half of the chapter examines the institutional setup for CC, starting with a detailed consideration of the devolution process through the recent 18th Amendment and then a consideration of the emerging setup at the federal and provincial level. Finally, the linkages between the Federal and governmental levels are considered and then the strengths and challenges of the institutional setup identified. This chapter focuses on policy and institutions whereas the resourcing and budget implications of CC are considered subsequently in Chapter 4.

### 3.2 CLIMATE CHANGE POLICY DEVELOPMENT

In 2011, the Ministry of Environment appointed a team of experts to develop the country's first comprehensive CC policy. This process built on many important efforts in the past that were in one way or another contributing to building the

CC agenda in Pakistan. Figure 3.1 highlights the chronology of some of these events. It is however, noteworthy that the CC debate in Pakistan has, until now, always been closely linked with debates on the environment. As such, the evolution of the 2012 Climate Change Policy can be linked to efforts that began in the 1970s.

**Figure 3.1: Significant developments leading to the formulation of the NCCP**



The increasing awareness of projected climate hazards and realization of the broad spectrum of CC impacts across many areas of socioeconomic development led to an increase in Government efforts to formulate an appropriate response. In 2002, the GCISC was established as a dedicated CC research centre focusing on CC-related aspects<sup>30</sup>. This Centre is presently attached to the MCC as its research arm. The year 2003 saw the submission of Pakistan's first initial National Communication on Climate Change (NCCC) to the United Nations Framework Convention on Climate Change (UNFCCC) developed under the auspices of the then Ministry of Environment. In 2005, Pakistan took another high-profile step and established the Prime Minister's Committee on Climate Change<sup>31</sup> (PMCCC) to provide a high-level interministerial platform to forge linkages and coherence between CC challenges and the risks that CC poses to

national development and planning.

In 2008, the then Planning Commission set up the TFCC. Its task was "to contribute to the formulation of a climate change policy that would assist the Government in pursuing the paramount goal of sustained economic growth by appropriately addressing the challenges posed by climate change". The outcomes of the TFCC final report, which was produced in February 2010, were used to help with policy development. Many of the TFCC's proposed recommendations and actions are identifiable in the NCCP produced two years later in 2012.

#### 3.2.1 The National Climate Change Policy

Approved by the Cabinet in September 2012 and formally launched by the MCC in February 2013, the resilient development<sup>32</sup>. The policy objectives are shown in Box 4.

30. It was granted the status of a regular national entity under the GCISC Act, 2013 in March the same year.

31. Chaired by the Prime Minister of Pakistan and includes the ministers of Water and Power, Food and Agriculture, Science and Technology and Environment, the Deputy Chairman of the MPDR, a Special Advisor to the Prime Minister, a co-opted member, Dr. Q. Z. Chaudhry and the Executive Director of the GCISC Secretary to the Committee.

32. NCCP, 2012.

## NCCP POLICY OBJECTIVES

1. Pursue sustained economic growth by appropriately addressing the challenges of CC;
2. Integrate CC policy with other interrelated national policies;
3. Focus on pro-poor, gender-sensitive adaptation while also promoting mitigation to the extent possible in a cost-effective manner;
4. Ensure water, food and energy security in the face of challenges posed by CC;
5. Minimize the risks arising from expected increases in frequency and intensity of extreme weather events such as floods, droughts and tropical storms;
6. Strengthen interministerial decision-making and coordination mechanisms on CC;
7. Facilitate effective use of opportunities, particularly financial, available both nationally and internationally;
8. Foster the development of appropriate economic incentives to encourage public and private sector investment in adaptation measures;
9. Enhance the awareness, skill and institutional capacity of relevant stakeholders;
10. Promote conservation of natural resources and long-term sustainability.

The focus is on adaptation in view of Pakistan's high vulnerability to the adverse impacts of CC, in particular extreme climate events. The policy highlights various sectors' vulnerabilities to CC and spells out appropriate adaptation measures. These sectors include water, agriculture, coastal areas, forestry, biodiversity and other vulnerable ecosystems.

The NCCP also recognizes that CC poses a serious risk to poverty reduction efforts and threatens development gains achieved over many decades. In fact, CC has already started affecting poor and underprivileged regions and communities in the country; CC increases their vulnerability as they have the least financial resources to adapt. The condition is further compromised because of their high dependence on natural resources. The NCCP also fully acknowledges the gender aspects of vulnerability from CC and proposes a number of gender-sensitive policy measures.

Though Pakistan's contribution to global GHG emissions is very small, the NCCP also gives due attention to mitigation by emphasising contributions to global mitigation efforts in sectors such as energy, transport, town planning, forestry, agriculture and livestock. Furthermore, appropriate measures relating to disaster preparedness, capacity building, institutional strengthening, technology transfer and international cooperation

for raising Pakistan's stance regarding CC at various international forums, have also been incorporated into the policy.

A particularly relevant aspect of the NCCP is its recommendation for the development of plans of action by the federal and provincial governments, and by the GB and AJK regions. It recommends separate implementation committees for the federal and provincial governments, representing different sectors. These committees would have the potential to be conduits of cross-sectoral dialogue, as well as between the federal and provincial levels.

As mentioned earlier, the NCCP was approved by the Cabinet, but not presented to Parliament. Parliamentary debates contribute to the policy narrative; parliamentarians are influential on public narrative and the budget and development agenda. A possible opportunity to engage with parliamentarians on the CC issue was therefore missed. The newly-established MCC, the National Assembly and Senate oversight committees now give CC a good entry point. However, it is important to recognize that CC is not the task of a single ministry; subsequent sections and chapters (4, 6–8) show that considerable efforts are being made by entities outside the MCC. Indeed, in time, it will be important to have a more overarching committee set up by the Speakers of the Houses at the national and provincial level.

### 3.2.2 Framework for climate change policy implementation

The Framework for the Implementation of the Climate Change Policy<sup>33</sup> is a follow-up of the NCCP. This framework document was developed as a catalyst for mainstreaming CC concerns into decision-making at both the federal and provincial level, thereby creating enabling conditions for integrated, climate-compatible development processes. It is therefore not a standalone document, but rather an integral and synergistic complement to future planning in the country. Furthermore, it was designed as a 'living document'. This flexibility is required because of the present uncertainty about the timing and exact magnitude of many of the likely impacts of CC, and the rapidly growing body of knowledge and experience from around the world that may help refine policy implementation in Pakistan. Therefore, periodic revisions and updates to the framework will be necessary to keep it relevant.

The framework highlights vulnerabilities to CC and appropriate adaptation and mitigation actions spelled out for various sectors<sup>34</sup>. In addition, it identifies actions associated with capacity building, institutional strengthening and promoting CC awareness in relevant sectors. However, specific sector policies remain the reference point for action rather than the NCCP, or the framework. Likewise, it is expected that the framework document would be used to prepare detailed provincial and local adaptation action plans, although this has not been the case so far. In fact, the framework and a follow-up work-programme for CC have not been used as guiding documents for decision-makers, particularly those in specific sectors.

### 3.2.3 Climate change linkages to key sectors

As will be seen in subsequent chapters, sector policies rather than the NCCP are driving public expenditure on CC. There is also little evidence that CC has been mainstreamed into other key relevant sectors' policy instruments. However, there are examples within the National Environmental Policy (2005) that recognize CC as an environmental issue, and propose the development of a national CC policy, energy efficiency and renewable energy

sources. However, a deeper linkage of climate vulnerability with the environmental sectors (e.g., agriculture, waste management and forestry) is not made, suggesting that CC is presented in this 2005 policy as an additional subject rather than being mainstreamed across key vulnerable sectors.

There is a clear linkage between the NCCP and the National Disaster Risk Reduction Policy (NDRRP), 2013 of the National Disaster Management Authority (NDMA); the two complement each other. The disaster policy concerns itself with risks, vulnerability and resilience issues, and also promotes a participatory and community-led approach to disaster management. The policy identifies the importance of linkages, stating that "it is imperative for the federal and provincial governments to dovetail all such initiatives of a structural and non-structural nature within the holistic framework of DRR [disaster risk reduction] in order to effectively contribute to the national agenda of making Pakistan a disaster-resilient country".

Power generation is a high priority for the Government and has direct links to the growth model of the FEG and Vision 2015. The policy principles of the National Power Policy (NPP), 2013 are efficiency, competition and sustainability. 'Sustainability' is not used in the environmental sense and instead relates to low-cost energy, a fair and level playing field and demand management (related to policy, pricing and regulatory instruments). The NPP is focused on filling the energy supply-demand gap in a cost-effective way, and suggests that this "could be eradicated by 2017".

However, there is another policy within the power sector that could have potential climate-relevant outcomes. The Alternative and Renewable Energy (ARE) Policy, 2011 promotes the development of renewable energy from a wide variety of sources (e.g., hydropower, solar power, biogas) by providing subsidies and incentives, and optimising its impact by focusing on underdeveloped areas. ARE also tried to resolve policy conflicts, addressed stakeholder concerns and proposed the establishment of the Alternative Energy Development Fund to promote the sector. However, the connection between ARE and

33. Framework for the Implementation of the Climate Change Policy, 2013.

34. Sectors include water, agriculture, forestry, coastal areas, biodiversity, health, vulnerable ecosystems, energy, transport, town planning, forestry, industry, agriculture and livestock.



NPP is not clear; the latter makes no mention of renewable energy technology, and it would be implicitly excluded on a cost-basis, anyway. There is compatibility with hydropower as both the NPP and ARE promote hydropower on the basis of cost and its renewable nature.

ARE, 2011 was developed when stakeholder consultations for the development of the NCCP were underway. As such, it is complementary to the CC policy and most of the policy measures regarding renewable energies are similar. Whilst some overlap exists, the purpose of ARE is explicitly power generation, especially in underdeveloped areas; the CC gains in terms of mitigation are a consequence, rather than a driver, for this policy.

A draft water policy was created, but has been unable to gain approval because of the competing interests of stakeholders. Increasing population and CC-induced water shortages have also made water a highly contentious issue, particularly among the provinces. This has made it very difficult to draft an acceptable water policy. The agriculture and food security policy, which is also still in draft form, aims to create a modern, efficient and diversified agricultural sector that can flexibly adapt to CC and be resilient enough to quickly recover from shocks and emergencies, but these are yet to be put in place.

### 3.2.4 Strengths and challenges of the climate change policy

The need for all climate-relevant sectors to be involved in the climate response is necessary to enable a 'whole-of-government' approach to addressing and responding to CC challenges. There are a number of strengths related to the sector arrangements for CC-delivery, but also a number of remaining challenges:

The strengths can be concluded as:

- **High-level endorsement for the need for CC to be mainstreamed through the main economic sectors as part of a strategy for growth.** High-level strategies identify climate-proofing investments and promoting green growth as tools for helping deliver competitive advantages and socioeconomic development. CC is a consistent entity in the FEG and Vision 2025 and

is supported by the Medium-Term Development Programme to operationalize these strategies. The need for an adequate CC strategy to meet the nation's economic and development goals is clear.

- **The draft National Sustainable Development Strategy (NSDS) portrays CC as a cornerstone for the sustainable future of the nation.** The draft NSSD is complementary to the NCCP and proposes some similar actions, such as the setting up of a nationally-managed climate change fund to help coordinate various sources of climate finance.
- **Disaster management risk reduction strategy includes extreme climate-related events and is in line with the NCCP.** The disaster sector supports policy objectives in the extreme-events area of CC and has already developed institutional arrangements for implementation at the federal and provincial levels.

The following challenges remain in the mainstreaming of CC in the sectors:

- **Sector policy is not always consistent in its inclusion of CC.** For example, within the power sector, the NPP does not consider mitigation issues but focuses on power generation at least/reasonable cost. However, within the power sector, it is the ARE policy that promotes renewable energy and mitigation benefits, although the costs per unit energy supplied in this way would be higher than the technologies in consideration in the NPP. The overall role of mitigation balanced against costs issues is not clearly articulated across the energy mix in the power generation sector.
- **Some sectors have outdated, lacking or unratified policy.** For example, there is a lack of a strategy for water management and conservation, a vital area for Pakistan's future under future CC projections. The NSSD has not been ratified and this, perhaps, reflects the need for collaborative working to develop policies that transcend sectors. The policy cycle will increasingly renew various policy documents, and if the processes are comprehensive, mainstream CC into these various sectors undergoing policy review.

- **There is no defined process for comprehensive inclusion of CC in developing sector policy at the federal or provincial level.** Embedding CC within policy is a technical and complex process due to the intricacies and uncertainties of CC. Setting appropriate policy objectives with robust indicators for monitoring can be a technical undertaking, for example, setting mitigation targets within the power sector. The capacity required to do this is high and likely to sit within both the MCC and the relevant line ministry; institutionalization of such collaboration would help to ensure the most focussed sector-level mainstreaming.

### 3.3 INSTITUTIONALIZING CLIMATE CHANGE

#### 3.3.1 Devolution through the 18th Amendment

Prior to consideration of the institutionalization of CC within the federal and provincial governments, it should be noted that a major change in governance took place in 2010. The 18th Amendment to the Constitution of Pakistan was passed in 2010 and mandated the devolution of 47 federal subjects to the provincial level, including 'environmental pollution and ecology'. CC has traditionally been considered to be within the ambit of the environmental sector, thus, CC was also devolved.

However, the provincial devolution of CC was not complete. Prior to devolution, the federal level (through the Ministry of Environment, now the MCC) had taken the lead on the implementation of international agreements and treaties related to environment and CC. It also dealt with the national overarching policy (i.e. the NCCP). This role was maintained post-devolution through a 'continuance' clause in the 18th Amendment. Thus, while devolution transferred much of the CC delivery to the provincial level, the federal level maintained responsibility for national and international policy and obligations (Appendix 3.1). The fact that the devolution process is still new and that there are dual-level responsibilities related to CC means that institutional clarity and clear working protocols have not yet been achieved.

Most significantly (and relevant to the previous section), there is a lack of uptake of the federal-led NCCP by the provinces. CC is already a complex issue with crosscutting characteristics. Devolution has further complicated the CC response in Pakistan, although efforts are being made to address this.

#### 3.3.2 The Ministry of Climate Change

The re-establishment of the MCC early in 2015 has given CC federal institutional prominence again, although the issue is still insufficiently prioritized across the sectors. The MCC underwent numerous transformations over the last decade, including a move from being a ministry to becoming a division under the Prime Minister's Office. This was reversed in 2015 when the Ministry was once again established as a full-fledged ministry. This suggests a renewed importance being placed on CC at the highest levels of Government, though it remains to be seen how this will translate into programmatic interventions. When the MCC was downgraded to the CCD<sup>35</sup> in 2013 as part of the Federal Cabinet Secretariat, the CCD faced a 62 percent budget cut in its annual spending<sup>36</sup>. However, it not yet possible to comment on the size of future budgets.

The MCC's core mandate is policy and planning in a range of environmentally-related sectors. Core to the MCC is the NCCP, the associated Framework for Implementation and the Clean Development mechanism (CDM) of the UNFCCC. However, the MCC is also responsible for other environmentally-related national policies, including sanitation, drinking water, forests and resettlement and environmental (PEPA) policies.

The MCC plays a limited awareness-raising role regarding CC actions. This is evident upon the CPEIR team's interactions with other ministries and their limited understanding and knowledge of CC. Most of the MCC's awareness-raising role is being fulfilled under the CDM<sup>37</sup> and NAMA projects; both mitigation approaches. However, the MCC has expressed willingness to mainstream CC-related finance. This would include introducing a system for coding CC-related expenditure in the national budget so as to establish a framework for tracking and reporting national CC expenditures.

The MCC also has plans to introduce an Accrediting National Implementing Entity (ANIE) for direct access to international climate funds and implementing projects for adaptation to, and mitigation of CC impacts. While it is presumed that an institution like ANIE would be a short- to medium-term solution to address some of the fiduciary risks that donors are wary of, a more sustainable solution will be the integration of CC within existing country systems, particularly planning and budgeting processes. This would also ensure that there is a comprehensive whole-of-government approach to responding to CC, affecting many different sectors, rather than a narrowly defined, environment-only linked response. As such, one of the recommendations being made in this report is the gradual mainstreaming of CC in core planning and budgeting processes, including a central role for the MoF in close collaboration with the MCC and the MPDR.

### 3.3.3 Institutional setup at the provincial level on climate change

In addition to the federal-level institutional response, there are also challenges at the provincial level. Clarity on the roles of different tiers of Government in legislation, regulation and enforcement is necessary for effective policy implementation. The devolution of environment (which includes CC) has brought it closer to the implementation level and will help in synthesizing sources of policy and regulatory regimes, but the provinces will have to respond to the new systemic requirements because of the transition and changing roles and responsibilities. CC has not been specifically allocated to the federation or provinces, but it will be instructive to discuss the issues governing environment given that there are overlapping themes and many CC issues are currently being dealt with by the provincial environment departments.

Despite devolution, provinces could be constrained in legislation and the regulation of the environment sector if due consideration is not given to policy and institutional linkages with other sectors. All four provinces have their own Environmental Protection Agencies (EPAs) which

are also responsible for adaptation and mitigation activities. The EPA in Punjab and KP is under the administrative control of the Environment Department; in Balochistan it is under the administrative control of Environment, Sports and Youth Affairs; and in Sindh it is under the control of the Environment and Energy Development Board. In AJK, it is under the control of the Planning and Development Department (P&DD) and in GB under the Forest, Wildlife and Environment Department. The diversity of institutional setups makes the formulation of a consistent process for provincial-federal harmonization more challenging.

There is no formal mechanism through which the PEPA (at the federal level) is linked with provincial EPAs. PEPA, 1997 did provide a common thread as it was a federal law but was being implemented by the provinces. Now that this commonality does not exist, PEPA can at best coordinate on surveys and reports and on the implementation of international treaties and agreements. There needs to be some coordination mechanism between federal and provincial EPAs to ensure effective implementation of policy instruments, international treaties and sanctifying CC/environment at the planning stage.

The way federal policy instruments are delivered in the provinces, and in particular, the way in which provincial needs for adaptation can be ensured through climate-proofing of federal initiatives, remains unclear. For example, environmental impact assessments (EIAs) for projects on the Federal Legislative List (nuclear power plant, highways and major ports) are a federal responsibility. However, provincial EPAs will have to rigorously coordinate with their respective local government departments to ensure there is adequate room for the implementation of adaptation and mitigation activities at the district/tehsil municipal administration (TMA) level in local government laws. The process by which the harmonization of the federal and provincial levels can be achieved must emerge to allow optimal gains to be made from the devolution process; this requirement covers the institutional, legislative and policy areas.

Environment is not the only subject area which requires collaborative working between the federal and provincial levels. For example, the NDMA

is a key federal entity responsible primarily for adaptation activities and building community resilience to cope with climatic disasters like floods. The NDRRP, 2012 builds on decentralized responsibilities as defined in the National Disaster Management Act, 2010 at the provincial and district level. While institutional structures have been set up (provincial disaster management commissions, provincial- and district-disaster management authorities), there remains a capacity gap for implementation. One of the principles of the NDRRP is a clearly-defined division of roles and responsibilities between different layers of Government. It states “DRR is first and foremost a provincial- and district-level subject. National policies provide an overarching framework for risk reduction but provincial, district and municipal governments, together with civil society groups, are best placed to promote and support risk-reduction behaviour among vulnerable communities. This requires a clear definition of roles and responsibilities between different layers of governance and actors” (NDRRP, 2012, point 2.3.6). Similarities between DRR and CC in terms of federal-provincial linkages are apparent, perhaps because DRR covers CC-related disasters, which include cyclones and flooding.

Other CC-relevant entities that exist at the federal level, but have Provincial Government involvement include the Pakistan Environmental Planning and Architectural Consultants, the Pakistan Environmental Protection Council, the Zoological Survey Department and the National Agriculture Research Council. Collaboration in all of these areas between the federal and provincial levels needs to occur for a harmonized approach, and within that, the emphasis on CC-related initiatives or CC-proofing of investments needs to be determined and implemented. Policy delivery and climate-compatible investment must be considered as well.

In KP, steps towards legislating for CC have already been taken with the introduction of the PEPA, 2014. The Chairman of KP’s taskforce on the Green Growth Initiative (GGI) recognizes that “Climate change remains a pressing challenge for the KP province owing to its geography and topography”. The GGI targets enhancing climate resilience through vulnerability mapping and

climate-proofing of provincial infrastructure. In our discussions with the Environment Department and Planning Division, recent floods and resulting infrastructure loss were used as an example of climate vulnerability. From the point of view of integration into planning and budgeting, PEPA, 2014 ensures that climate adaptation concerns will be integrated into the planning process through EIAs and PC-I preparation stages. The KP Act introduces a decision support process for ‘strategic environment assessments’ for certain areas. The Director General of the EPA explained that this would help in assessing both policies and projects. While the strategic environmental assessment (SEA) does not yet specifically mention CC, the Provincial Environmental Protection Council notification may be used as a vehicle to make CC explicit in the SEAs.

### 3.3.4 Federal and provincial linkages on climate change

Pakistan has a relatively modest set of intergovernmental institutions given that the devolution process is still new. However, with devolution, one important collaborative government entity has been re-invigorated to promote a more harmonized approach between federal and provincial interests - the Council of Common Interests (CCI), which dates back to the 1973 Constitution. Besides Pakistan, such a body is a distinct feature of 28 federally organized countries in the world that have at least two or more tiers of constitutionally-defined governments on the same set of population and territory (UNDP 2013<sup>38</sup>). The CCI was not very active in the decade prior to the 18th Amendment, in part because of a period of authoritarian rule<sup>39</sup>. It averaged just one meeting every three years between 1973 and 2010. However, devolution saw the CCI meeting about four times a year and discussing a wider variety of topics, including flood crisis response<sup>40</sup>. The Council is envisaged to become an effective dispute resolution and economic planning and development forum to further the cause of participatory federalism.<sup>41</sup> A number of changes have been made to the CCI through the 18th Amendment, permitting it to emerge as one of the most important forums in the federal institutional

38. Ahmed Mehmood Zahid, “Institutional analysis of Council of Common Interests (CCI): A guide for functionaries”, (United Nations publication). Available from <http://www.pk.undp.org/content/dam/pakistan/docs/Democratic%20Governance/Federalism/CCI%20Manual%20%281%29.pdf>.

39. The CCI was held in abeyance in 1977 by the imposition of martial law. Its federal spirit was changed in 1985 through the 8th Amendment. It was held in abeyance again in 1999. The year 2003 saw it given a quasi-presidential form through the 17th Amendment.

framework. One change includes further clarity and expansion of its reporting and accountability, which, since the 18th Amendment, has been to annually report to both houses of Parliament. Promoting linkages between Federal and provincial endeavours and responsibilities through the CCI with accountability to the parliamentary system provides a potentially robust institutional setup for refining remaining issues falling in Part II of the Federal Legislative List after the 18th Amendment.

The invigorated CCI provides an opportunity for some of the complexities of CC to be discussed in a high-level and authoritative forum. The inclusion of the MCC as one of the three federal ministries (or as an invited guest by the Prime Minister through the Secretariat) could further strengthen this discussion. Processing CC through the CCI in this way could help create a clear dictate for the CC-response through unpacking and clarifying the distribution of provincial and federal CC responsibilities. In addition, the CCI could further establish the importance of CC policies and links to the sectors, as well as fast-tracking the undertaking of CC-responses in the provinces.

There is also the IPC Division at the federal level which was established to settle cases of major importance that require policy decisions and mutual discussions between the federal and the provincial governments<sup>42</sup>. The importance of the IPC has increased after the 18th Amendment. Since environment is now a residual subject, and thus a responsibility of the Provincial Government, any policy/regulatory/administrative issues with broad-based repercussions could be taken up by the IPC. The IPC Division also serves as the CCI's secretariat.

As discussed earlier, the 18th Amendment has long-ranging implications for institutional arrangements and the dispensation of governance in Pakistan. The devolution process provides an opportunity to coordinate the federal and provincial inter-linkage better on crosscutting subjects like CC through strengthened bodies such as the CCI. It also allows tailoring the CC-response more closely to provincial needs.

### 3.3.5 Strengths and challenges of the institutional setup

Devolution through the 18th Amendment was a substantial modification to the governmental and governance system of Pakistan that would inevitably have important consequences for the CC response. The following points try to encapsulate some of the possible strengths and weaknesses of the devolution process.

Challenges of the devolution process for CC include:

- **Unclear division of responsibilities between the federal and provincial levels:** While the abolition of the Concurrent List was meant to have removed the complexities associated with shared responsibility, the devolution process has in fact re-established a slightly different version of complexities. The federation is responsible for the implementation of international agreements and treaties<sup>43</sup>, but CC implementation lies with the provinces, which makes coordination for compliance to agreements complex.
- **A lack of processes for a comprehensive collective establishment of federal-provincial harmonized CC response:** While there are institutional structures at both the federal and provincial level, there seems to be a lack of systems and processes that can lead to collaboration for a harmonized outcome for CC response. Progress towards the development of a detailed and technical agreement on CC-response across the Centre and the provinces is vital to ensure efficient budget spending and to target expenditure on CC issues that are directly relevance to the local geomorphological and socioeconomic character of each province.
- **The lack of a policy framework and capacity within provinces:** The devolvement of CC-delivery to the provinces places this responsibility in a historical vacuum in terms of capacity and a policy framework. There was no development of provincial CC policy before 2010 as leadership was, in practical terms, provided at the federal level. However, the provinces were not only presupposed to be able to set policy objectives and assess CC-related

40. Ahmed Mehmood Zahid, "Institutional analysis of Council of Common Interests (CCI): A guide for functionaries", (United Nations publication). Available from <http://www.pk.undp.org/content/dam/pakistan/docs/Democratic%20Governance/Federalism/CCI%20Manual%20%281%29.pdf>.

41. Rabbani, Raza. 2012. A Biography of Pakistani Federalism: Unity in diversity. Islamabad: Leo Books.

42. Government of Pakistan, "Inter-Provincial Coordination Division", 2011–2012. Available from <http://www.ipc.gov.pk/>.

43. International treaties, conventions and agreements and international arbitration are part of the Federal Legislative List.



expenditure priorities post 2010, but also to target interventions with the most cost-effective outcomes. The lack of policy leadership and capacity in provinces undermines some of the benefits of devolution.

The strengths of the post-devolution setup include:

- **Closer links between local vulnerabilities and site-specific adaptation activities:** With increased clarity in CC-response directions and increased discretionary expenditure, the provinces can improve the fit between budget expenditures and local needs, over time. Provincial discretion in setting budget expenditures is likely to improve the linkage between vulnerability and expenditure.
- **The national policy frame of the NCCP can be downscaled to provide impetus for the provinces:** With the promulgation of the NCCP, the provinces have a robust starting point for elaboration of provincial policy objectives relevant to the provincial context. The NCCP provides solid guidance on key activity areas and outcomes required for a CC response across the country. The NCCP can thus help fast-tracking the provinces towards more critical appraisal and cost-effective discretionary budget spending.
- **Opportunity for enhanced collaborative and harmonized working:** As the devolution process has not fully devolved CC to the provinces, there remains the opportunity to optimize the capitalization on skills and competences of multi-level institutions. With a robust process to harmonize the multi-level CC response, the division of responsibilities can maximise the capitalization of CC-delivery as well as opportunities for financial support. For example, the close nature of provincial administrations to their localities could make them most appropriate for delivering adaptation gains to their inhabitants and resources, whereas the federal position in the UNFCCC and allied GHG emissions budgets may make it more appropriate to lead national mitigation actions. An agreed division of responsibility and enhanced capacity in certain areas can promote a clearer dialogue to development partners in areas that grants and

budget support would be most needed, and provide cost-effective interventions.

### 3.4 CHALLENGES FOR AN INTEGRATED CLIMATE CHANGE RESPONSE

This chapter has separately considered the policy and institutional domains of CC. However, there are a number of identifiable challenges related to a more integrated CC response when these two areas are combined.

- **Other significant governmental challenges:** the most serious challenge CC policy is facing in its implementation is that the Government's priority is focused on other difficult challenges the country is facing. Chief among these are terrorism and energy shortages. Most efforts and financial resources are targeted at these problems and hardly any time or financial resources are left for dealing with CC aspects. However, certain provinces may provide increased leeway for a focus on sustainable economic development and enhanced wellbeing, including building resilience to CC.
- **CC prioritization:** the comprehensive nature of the policy means that policy delivery requires significant political commitment and financial and technological inputs over a broad range of sectors such as energy, transport, water, agriculture, town planning and DRR activities. Within a resource-constrained environment, some degree of prioritization is required to ensure the most effective use of resources. Though the framework for the implementation of CC policy does provide some degree of broad prioritization, further work is required on the development of provincial CC action plans. The policy does emphasize that it targets vulnerability and supports climate resilient development,<sup>44</sup> and thus has a relatively explicit adaptation focus.
- **Provincial ownership and delivery:** Devolution has helped erode ownership of the NCCP by the provinces with their increasing degree of autonomy. Political differences between some provincial governments and the Federal Government can also affect provincial policy ownership and implementation. For



- example, KP has announced its intention to formulate its own provincial CC policy. While the development of a provincial CC policy is a useful and necessary step to point resources at key provincial issues, the mechanism and process for provincial policy delivery are not defined and could potentially be highly variable between provinces. There is considerable value in linking provincial policy to the NCCP. Unless a provincial policy process is defined, any degree of uniformity or consistency in provincial policy remains uncertain.
- **Coordination and facilitation:** The MCC leads coordination on CC and the NCCP, as well as being the entity engaged with the UNFCCC and host of the CDM of the UNFCCC (presently a portfolio of 24 projects). However, delivery of much of the NCCP relies on the provinces to which important sectors such as environment and forestry have been devolved. The MCC's challenge is to be able to organize and orientate federal and provincial efforts in CC response, which will largely take place in provincially-devolved sectors. To coordinate effectively, there is a need for ongoing monitoring and assessment of provincial efforts through appropriate information flow from the provinces to the MCC; such information needs a degree of consistency between the provinces in order to furnish the MCC with a unified perspective. A lack of information will undermine the MCC's ability to effectively coordinate, orientate and prioritize the response.
  - The present post-devolution situation is that the MCC (formerly the CCD and Ministry of Environment) was deferred continuance for ongoing international-, national- and federal-level CC coordination whereas CC delivery and implementation were devolved to the provinces along with funding, as specified in the seventh NFC Award.
  - Harmonization between federal and provincial institutions has the potential to be supported by various bodies (e.g., the CCI), but the diversity of provincial institutional setups makes the formulation of a consistent process for provincial-federal harmonization very challenging. Opportunities for harmonization within CC have yet to be exploited, though there are examples in environmental protection and disaster management.
  - Pakistan's first CC policy, the NCCP, was approved in 2012 to ensure that CC was mainstreamed in the economically and socially vulnerable sectors of the economy, and to steer Pakistan towards climate-resilient development. In 2013, a Framework for the Implementation of the CC policy was developed as a catalyst to mainstream CC concerns into decision-making at the federal and provincial levels. A further consideration was creating enabling conditions for integrated climate-compatible development processes.
  - The NCCP and framework were comprehensive and developed through extensive consultation. However, there are a number of challenges related to implementation. These include overriding and pressing governmental challenges such as security and energy supply, leadership and decision-making to prioritize CC responses, coordination and facilitation of CC across sectors and provinces, and the development of sector/provincial CC policies and strategies.
- 3.5 FINDINGS AND CONCLUSIONS**
- CC developed under the umbrella of "environment" during the first decade of the millennium and was positioned mainly in the then Federal Ministry of Environment. In 2010, the 18th Amendment devolved CC to the provinces under the auspices of 'environmental pollution and ecology'.

44. NCCP goal: "To ensure that climate change is mainstreamed in the economically and socially vulnerable sectors of the economy and to steer Pakistan towards climate resilient development."



04



# CLIMATE CHANGE AND THE BUDGET PROCESS

## 4.1 CLIMATE CHANGE AND PLANNING

It is well recognized that Pakistan has been a responsible and active global participant of the climate debate. As the chair of the G77 Negotiating Group in 1992 and 2007, Pakistan spearheaded consensus-building on the basic founding principles of the UNFCCC as well as agreement on the four building blocks of climate change, namely mitigation, adaptation, technology and finance - which have framed the debate ever since<sup>45</sup>. While highly commendable on a world stage, the effects of this commitment are not so easily discernible in the GoP's overall policy framework at home, both at the Federal and the Provincial level.

The three key institutions at the federal level directly involved in CC investment decisions are:

- The MPDR (formerly the Planning Commission) - responsible for the development of the Public Sector Development Programme (PSDP) in coordination with relevant ministries;
- The MoF - responsible for current and development budgetary allocations;
- The MCC - custodian of the Climate Change Policy, 2012.

This chapter focuses on planning and budget processes and their present and future linkages with CC. The chapter commences with a consideration of the main governmental planning tools and the positioning of CC within them. It then considers the federal PFM system, and in particular, the MTBF which has become the key planning and budgeting approach for the budget; a focus is made on the selection criteria for development projects. The chapter then shifts focus to the budget arrangements and positioning of CC in the provinces, with particular reference to KP. A number of key findings and conclusions are made after revising the degree to which CC is embedded and institutionalized within the Government.

## 4.2 PLANNING PROCESSES IN PAKISTAN AND CLIMATE CHANGE

Development investments in Pakistan are largely in the public sector. Although there may be economic growth instigated through the private sector in the Pakistani ethos of social development, both poverty alleviation and development remain firmly the responsibility of the State. This perspective of development becomes quite important in the context of CC as across the globe and in Pakistan, climate-related investments are needed in both the public and private sector. While the focus of this review is on public sector investments, the importance of country-level development processes enabling a more involved private sector, cannot be underscored enough (e.g., public-private partnerships at the strategic level).

A review of the literature shows that CC has been increasingly linked to vulnerability and poverty, circa 2005 and beyond. The Poverty Reduction Strategy Paper (PRSP) II (2009) takes cognizance of the IPCC's fourth report and emphasizes CC as a challenge to poverty reduction, hence increasing the development-related aspect of CC by adding social development to the realm of economic development.

A departure from the paradigmatic aligning of CC and environment is seen in the recent Sustainable Development Strategy, 2012, which is yet to be officially approved. It elaborates on Pakistan's position in the global CC challenge while emphasizing "globally-accepted principles of ensuring equity" that are aligned with "common, but differentiated responsibilities" between developed and developing countries (NSDS 2012:48),

Pakistan is a very small contributor to the problem. It has among the world's lowest per-capita GHG emissions, accounting for just 0.8 percent<sup>47</sup> of the

45. Malik Amin Aslam Khan, Pervaiz Amir, Shakeel Ahmad Ramay, Zuhair Munawar and Vaqar Ahmad, "National economic and environmental development study (NEEDS)", Report (Islamabad, Ministry of Environment, 2011). Available from <https://unfccc.int/files/adaptation/application/pdf/pakistanneeds.pdf>.

total. Yet, it is one of the worst casualties of CC. This undeniable fact is being duly acknowledged as the country is now consistently placed in the extreme vulnerable category by a host of CC impact indices. These include the Maple Croft index, the Columbia University Vulnerability Index and the recently launched GermanWatch Climate Risk Index, which has placed Pakistan at the top of the list of countries at risk from CC in 2010 (ibid).

#### 4.2.1 The PSDP

Since its inception in 1958, the Planning Commission (now the MPDR) has been a significant planning and coordinating body (Appendix 4.1). Planning in Pakistan is undertaken via the formulation of long-, medium- and short-term planning documents at the federal and provincial level. Different kinds of plans, distinguished on the basis of timeframe and emphasis, are developed by the Government which include:

- Perspective plans<sup>48</sup> (15–25-year economic and social policy visions);
- Five-year plans<sup>49</sup> (general statements of objectives and targets relating to the economy);
- Roll-on plans<sup>50</sup> (three-year, medium-term plans designed for sectoral and project-wise adjustments in five-year plans and annual plans).

The Federal Government produces a PSDP through the MPDR which lists all public sector projects/programmes with specific allocations made for each in a particular financial year.<sup>51</sup> Similarly, Annual Development Plans (ADPs) are published by provincial governments.

To be included in the PSDP, projects require approval by the sanctioning machinery of the Government after due scrutiny of various technical, financial and organizational aspects. The introduction of the Medium-Term Development Framework (MTDF) in 2005 saw a shift to indicative planning. This was preceded by the introduction of the MTBF in 2003. At this point, one can argue for the influence of shifting institutional importance whereby the MTBF produced by the MoF has become the major tool for indicative planning and budgeting.

#### 4.2.2 Climate change in federal and KP planning documents

References to CC in planning documents at the Federal level were all within the discussion on environment. The MPDR's Annual Plan, 2013/14 discusses CC in a chapter on environment. The Plan includes both CC adaptation and mitigation as environmental challenges. The challenges of the environmental sector include (Annual Plan 2013/14, p. 135):

- Adaptation to CC impacts for energy, water and food security;
- Preparedness for A/M due to CC and availing opportunities under CDM.

In similar fashion, the Pakistan Economic Survey (2006–2014) positioned CC in the chapter on environment. The Survey has been mentioning the NCCP since 2012/13, albeit under the environment section. This is a positive development as such mentions are a step that is necessary for policy integration into mainstream public sector discourse. It is worth mentioning that all of the Economic Surveys mention CC and give related statistics. In addition, CC is explicitly mentioned in the PRSP II (2007–2009) under environment and integrated energy resources.

In the case of KP though, the documents consulted show that environment and CC are not dealt with under the same rubric. The KP Environmental Protection Agency (EPA) is the custodian for the PEPA Act, dealing with environmental regulations, with the addition of CC since December 2014. The Economic Analysis Section within the provincial P&DD has been mandated with policy issues regarding CC. CC is considered a development issue and documents mentioned analyses linking the Millennium Development Goals (MDGs), CC and social protection in 2011/12. However, during discussions with the Finance Department, it was felt that there was a gap between written and actual understanding in government bodies; CC was clearly not seen as a priority. Furthermore, poverty was listed as an immediate problem to tackle, but its link to CC was not clearly acknowledged.

47. Pakistan, Ministry of Planning, Development and Reforms, Final Report of the Task Force on Climate Change (Islamabad, 2010).

48. Vision 2025 was launched on 11 August 2015.

49. Five-year plans were once the backbone of development planning in Pakistan. However, there have been none since 2005.

50. This role has been taken up by the MoF whereby the MTBF serves as the plan for all government entities to adhere to.

51. The PSDP includes the total cost of each project, the foreign exchange component of the total cost and expenditures incurred up until the end of the last financial year.

### 4.3 FEDERAL PUBLIC FINANCIAL MANAGEMENT

The PFM structure has changed since the 1973 Constitution. The accounting and audit function are historically separate, sitting presently with the Accountant General of Pakistan (AGP) and the Controller General of Accounts (CGA), respectively. Legislative scrutiny of public accounts is presently done by Public Accounts Committees (PACs) at the federal and provincial level. Enhanced accounting and auditing procedures have been implemented over the last few years through the Project for Improvement of Fiscal Reporting and Auditing (PIFRA) (Appendix 4.2). Since 2003, a three-year rolling MTBF has been expanded across all federal and provincial governments. This has connotations for both CC planning and budgeting.

#### 4.3.1 The MTBF budget process

Since 2003, the three-year rolling MTBF has aimed “to strengthen the alignment of allocations through the federal budget to the strategies and policies of the Government”.<sup>52</sup> At present, the federal MTBF is in a more advanced stage than the provincial MTBFs.

The lynchpin for starting the annual budgetary process at the federal-level MTBF is based on two mutually reinforcing processes:

- The ‘top-down’ approach establishes medium-term ceilings for each line ministry at the start of the annual budget preparation process;
- The ‘bottom-up’ approach sets in motion the budget-making process within line ministries, directed by senior management.

Since 2012, the MTBF requires ministry/division-wise information on an annual basis. For example, the MTBF defines, the ‘protection of environment, energy and conservation of wildlife’ as an outcome of the MCC. The MCC’s entire budget is broken down to lines following four defined MTBF outputs:

- Protection of environment and energy services;
- Social work/capacity building services;
- Conservation of wild life and forests;
- Research and survey services.

Budget preparation is a multi-stage affair lasting some seven months. It calls for the involvement

of all ministries in providing information to help determine budget ceilings. The process is managed by the MoF’s Finance Division (Figure 4.1). Within an initially set budget ceiling, ministry-level output-based budgeting defines the desired policy-related outcomes and costs of those outcomes for each ministry. These ministry-level inputs are reviewed and revised, and the draft budget is finally submitted to the National Economic Council (NEC), Cabinet and Parliament for approval. The MTBF provides a very good opportunity for ensuring that CC is considered an essential part of development policy and is accounted for in planning and budgeting.

With the budget being set along institutional (ministry) lines and predicated on policy-related outputs in each of the ministries, budget allocation tends to reinforce core and normal business activities. For example, the construction of a dam by the MoWP requires the budget process to be aligned to provide a budget for that purpose. Projects that focus solely on mitigation or adaption to CC rank low on the prioritization scale at all levels of decision-making. However, large investment projects, e.g., current hydropower projects for increasing energy supplies and water availability rank high on the priority scale; it is a fortunate outcome that externalities lead to CC mitigation.

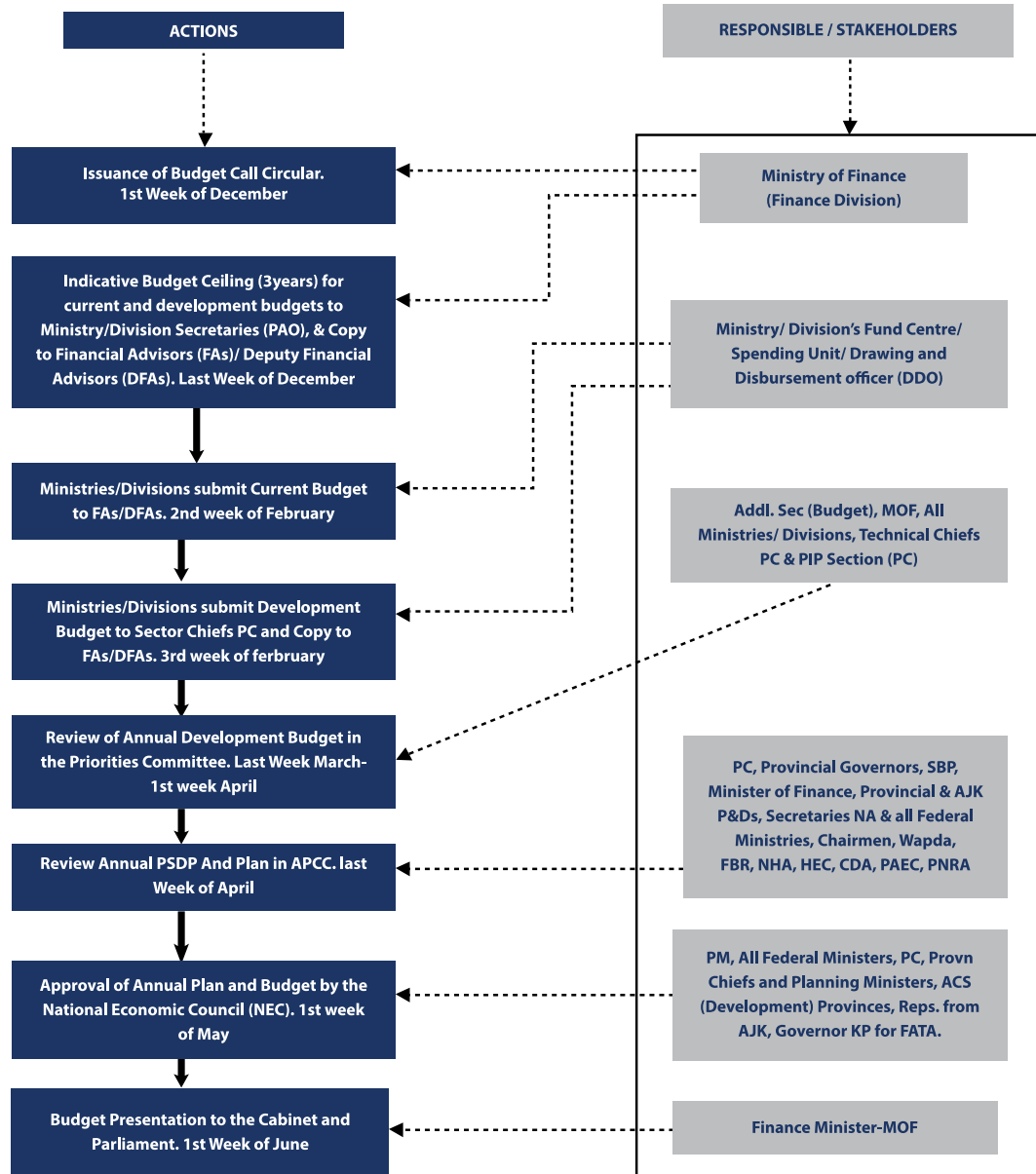
For CC, the delivery of outcomes will not generally rest within the associated institution (MCC), but with a wide range of ministries in relevant sectors such as water, power and agriculture. Within this array of ministries, many projects will not be explicitly linked with CC, but may have small elements of climate proofing within them. Thus, the setting of budget ceilings for policy-related outcomes tends to focus on key development purposes like the aforementioned dam, and exclude associated positive attributes such as climate proofing.

Ministries will concentrate on their own key sector policies as major drivers for the derivation of their investments and most likely pay minimal attention to umbrella policies such as the NCCP. This approach may be correct in that it focuses the ministry on associated policy delivery, but provides a negligible entry point for CC in the preparation of MTBF budget ceilings.

52. MTBF-based budgets were first piloted in the Ministry of Health and the Ministry of Population Welfare in 2005/06. The MTBF was rolled out to another three ministries in 2006/7 (Food and Agriculture, Education and Women Development). The next two years witnessed the rollout to 20 ministries. The Cabinet approved a complete MTBF roll out to all line ministries other than the Ministry of Defence in 2009/10.



Figure 4.1: Diagrammatic representation of budget preparation, budget-approval cycle, timeline and associated stakeholders



**4.3.2 The role of selection committees**

Figure 4.1 is something of a simplification of the process required to develop budgets at the line ministry level. After receiving indicative ceilings from the Finance Division, the fund centres of individual line ministries prepare project feasibility reports (PC-I pro-formas) and categorize new projects for review by three selection committees as per the following investment limits (Figure 4.2)<sup>53</sup>.

- Projects costing less than PKR 40 million

are finalized and approved by an in-house Departmental Development Working Party (DDWP) under the chairmanship of the secretary of the line ministry/division.

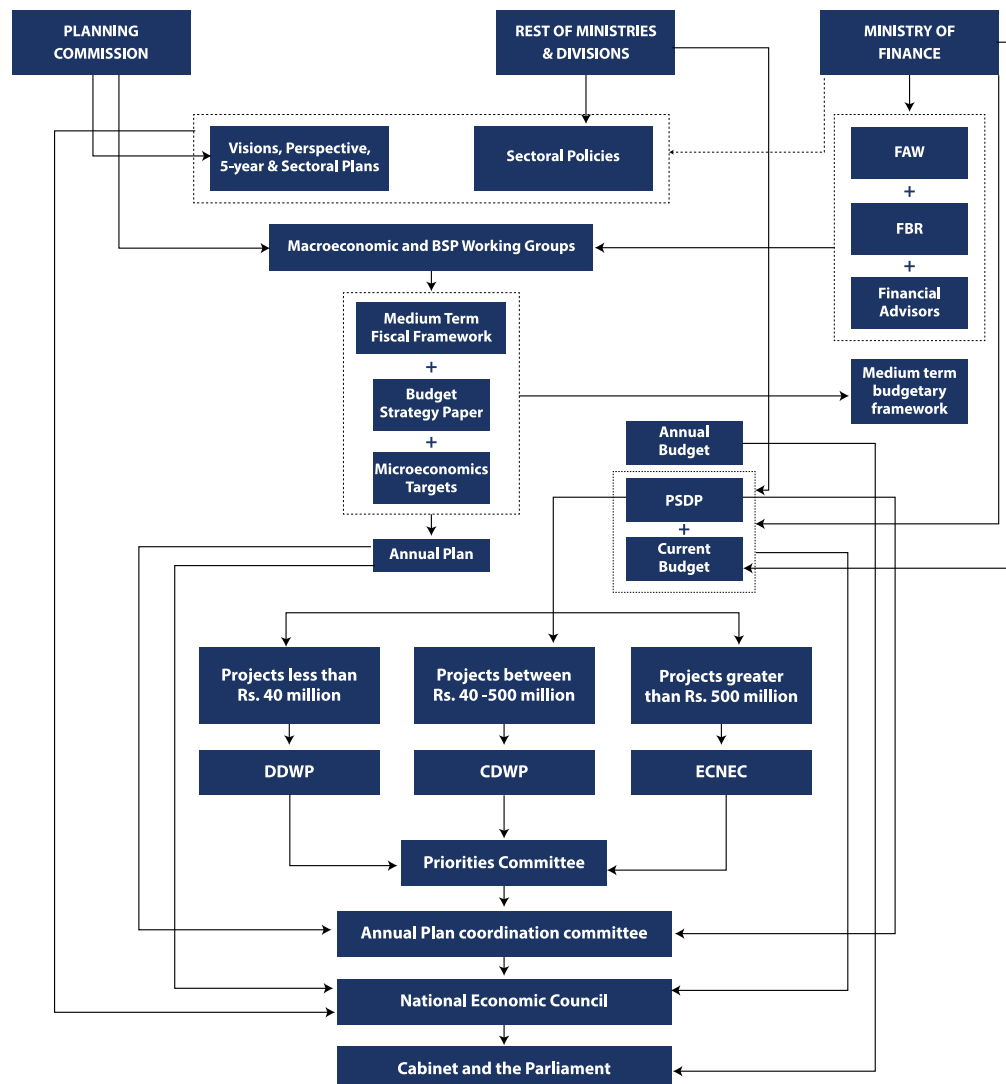
- Projects costing PKR 40 million–500 million require a Central Development Working Party (CDWP) headed by the Deputy Chairman of the MPDR with members from the MoF and respective ministries to approve and recommend them for inclusion in the PSDP.

- Projects costing more than PKR 500 million are reviewed and approved for PSDP inclusion by the ECNEC, which is chaired by the Prime Minister/Finance Minister and attended by representatives from all ministries, including the MPDR and provincial finance ministers and relevant finance officials. Decisions from these three selection committees flow to the Priorities Committee.

The approval of projects by different committees depends upon their financial outlays, making it expedient for CC to be recognized at different tiers of the Government and by different sectors. The PC-I, a fundamental document

for project approval, also requires EIAs and Initial Environmental Examinations (IEEs). This provides an opportunity to review projects from an environmental angle. There is now a need to review projects from a CC lens which necessitates the inclusion of CC in all PC formats (I-V) so that it becomes one of the indicators for committees to consider when approving projects. The schemes/projects recommended by the three aforementioned committees are put together by each of the line ministries and submitted as line ministry development budgets to Sector Chiefs of the MPDR and financial advisors (FAs). These projects are discussed in the Priorities Committee

**Figure 4.2: The positioning of the selection committees (DDWP, CDWP and ECNEC) in the wider budget preparation process**



53. The present method for planning, processing and reporting on development projects is based on five pro-formae. Project appraisal and approval requires the submission of project proposals (PC-I and PC-II). Progress of on-going projects is reported in the PC-III. PC-IV and PC-V are submitted after project completion.

of the MPDR and recommended individually. Contours of overall PSDP allocations for the next year are established. The Priorities Committee's function is to discuss and recommend the scheme-wise and overall allocations of the PSDP of the next year for submission to the Annual Plan Coordination Committee (APCC). It is chaired by the Additional Finance Secretary (budget)<sup>54</sup>.

The proposed Annual Plan (of the next year) formulated by the MPDR and the PSDP of the Priorities Committee are submitted for review and deliberations to the APCC, chaired by the Deputy Chairman of the MPDR and a host of high-level federal and provincial finance officials, including the Governor of the State Bank of Pakistan (SBP). The proposed Annual Plan and the annual budget (PSDP) plus the recurrent budget are submitted for approval to the NEC. Finally, the annual federal budget is presented to the Cabinet and the Parliament by the Finance Minister for approval.

#### 4.3.3 Climate change in the PSDP

In theory, budget ceilings are allocated according to the MTBF. However, in practice, there are many strategic objectives, both political and non-political. These include whether or not the country is under an International Monetary Fund (IMF) programme that affects the ceilings. For the MTBF 2013–2016, the then CCD's budget (both current and development) estimate for 2013/14 was fixed at PKR 489 million. In the MTBF 2014–2017, the CCD's budget estimate (BE) for 2013/14 was revised downwards to PKR 308 million, including forecasts for 2015/16 and 2016/17.<sup>55</sup>

There are no concrete criteria for decisions regarding the inclusion of projects in the PSDP. Stakeholder political influences, parliamentary influences<sup>56</sup>, and political party priorities, sectoral policies and foreign funding (to a lesser degree) are some of the factors that shape the final list of projects included in the PSDP. Block expenditure allocations are also made in the budget for line ministries for priority projects whose PC-Is are not ready at the time of budget finalization. This also applies to projects whose approval may have

been granted during the year in CDWP and ECNEC meetings.

The selection process is an ongoing one and, in a step-wise manner, creates a portfolio of investments to be funded subject to other factors, provided adequate budget resources are available. Being spread across so many sectors but not of prime concern, CC is well-positioned to be one investment attribute that influences selection committee decision-making. However, doing this will require the sensitization of committee members in order to appreciate the severity of climate impacts in terms of undermining development investments. Investments in which interventions are climate proofed are more likely to provide an extended functional/operational value and a better return on investment. Within the federal PSDP budget, positively selecting projects with attributes related to positive CC response could dramatically extend CC mainstreaming across multiple sectors. It could also promote more sustainable investments.

## 4.4 DELIVERY OF THE FEDERAL PSDP BUDGET

### 4.4.1 PSDP implementation

At the implementation stage, Finance and Planning Divisions/Departments continue to possess a strong role, not only in allocating fiscal resources across sectors and departments, but also among expenditure heads, activities and schemes. For example, no re-appropriation from, to, or within establishment charges can be made without the prior concurrence of the Finance Division/Department. Such centralized controls discourage line ministries from saving on wages (in case planned vacancies in the line ministries are not filled) and diverting funds to enhance allocation for repair and maintenance (R&M) expenditures. Re-appropriation allows some flexibility to the line ministry to re-appropriate (divert) funds (with Finance Division approval) during the year from slow-moving projects to faster ones.

54. Members also include Technical Chiefs of the P&DD, the Chief of the Public Investment Programme Section (Planning Commission) and representatives of all ministries/divisions.

55. Federal medium-term budget estimates for service delivery, 2013–2016 and 2014–2017.

56. All federal ministers and provincial finance and planning ministers are members of ECNEC, the body that approves projects valued at more than PKR 500 million. Once large projects reflect the political interests of various ministers, they may crowd out investments even in smaller projects or development budgets of smaller ministries specifically under tight fiscal space. One of the functions of ECNEC is "to allow moderate changes in the plan and sectoral re-adjustments within the overall plan allocations".

#### 4.4.2 PSDP monitoring and evaluation

The monitoring of projects, five-year plans and perspective plans is undertaken by the MPDR. Projects are monitored (through the PC-III pro-forma) to assess their implementation in accordance with timelines, costs, quality and outputs specified in PC-Is and PC-IIs. The evaluation of projects is carried out after their completion through reporting in the PC-IV form. The PC-V is submitted annually for five years by the agency responsible for operations and maintenance.

The monitoring activities undertaken by the MPDR and documented in the PC-III are input-, activity- and output-based, and not outcome based. The purpose of the monitoring activity is to reduce the incidence of cost overruns and time delays in project implementation and ensure smooth functioning. The evaluation process of projects in terms of outcomes (as distinguished from impact) as envisaged in the PC-IV and PC-V is not a regular and active practice, and is being strengthened. However, since 2012, the MTBF requires ministry/division-wise information on an annual basis.

#### 4.5 THE PROVINCIAL BUDGET PROCESS AND CLIMATE CHANGE

During the last decade and even prior to the passage of the 18th Amendment, the four provinces were actively pursuing a greater role, autonomy and involvement in formulating sub-national economic policies and plans. During the last five years, following provincial medium-term plans, development frameworks and crisis management, policies reflect complete ownership and Provincial Government (KP) commitment in pursuing sustainable development in the province. This is evident from the Strategic Development Partnership Framework (October 2013), the Economic Growth Strategy, the Comprehensive Development Strategy (2010–2017), the MDGs Report, 2011 and the Post-Crisis Needs Assessment, 2009/10 (with development partner collaboration).

Compared to the strength of linkages between planning/policy documents and budget formulation at the federal level, the strength of linkages between planning documents and budgetary allocations was weak prior to devolution

and the 18th Amendment at the provincial level. However, it is gaining momentum in KP after devolution. One of the main reasons for the dearth of sector-specific policies at the provincial level is the province's weak technical capacity to formulate such policies. In many instances, the provincial governments, including the Government of KP, 'piggyback' on federal policy, making only minor policy changes. Although the province is dependent on the Federal Government for 75–80 percent of its resources (development and current), it is free to spend the transfers (fiscal revenue, grants, straight transfers and foreign loans guaranteed by the Centre) at its own discretion.

The formulation and allocation of KP's recurrent budget (constituting 70–80 percent of the total budget) is largely in the hands of the provincial Finance Department headed by the Additional Chief Secretary of the province. This component is financed out of Federal transfers and provincial revenue generation. The province's development budget or ADPs are formulated in collaboration with the Finance and P&DDs of the province. Other stakeholders include federal agencies (CDWP, APCC, NEC, Cabinet and the Parliament), but the ADP is financed mostly from the province's legal share of resources under the NFC Award.

Within the province, the Provincial Development Working Party (PDWP) scrutinizes and approves all provincial projects:

- Costing up to PKR 200 million (local currency), or those with a foreign exchange component below a 25 percent limit;
- Costing up to PKR 1,000 million that are fully funded through provincial resources;
- Costing more than the aforementioned limits. These are submitted for approval to the MPDR/CDWP.

The KP's budget approval and project inclusion cycle are similar to the federal-level process. Budget call circulars are issued to all departments and agencies in October for the preparation of the following year's budget. The practice entails the formulation of development and recurrent budgets by the line departments. The budget of the previous fiscal year is also reviewed and revised estimates are prepared during the October–

January period. Budgeting issues such as the need for additional staff, the surrender/re-appropriation of allocations, and requests for additional grants are also resolved in this review.

Project proposals for development budgets or ADPs are received by the MPDR from the line departments in December. These are filtered in the Finance Department and MPDR. In March, the project's concept is approved under the Chairmanship of the Chief Minister (CM) of the province, based on priorities, costs, rates of return, priority to backward areas to maintain regional balance, and political agenda.<sup>57</sup> In May, secretaries of various line ministries present their projects to the CM for inclusion in the provincial budget. On average, the CM selects 30 percent of the projects. Project financing and approval is often political as districts do not always get their due share of development projects. Funds are allocated depending on the political clout of a particular district rather than on the basis of need.

The 18th Amendment affected the provinces' PFM systems from both the revenue and expenditure side. The increase in expenditures associated with the devolution of responsibilities outweighed the revenue gains from the NFC Award. On the revenue front, KP's tax base is small and not increasing at an encouraging rate due to the law and order situation, capital flight, professional outmigration and energy shortages. The paradox in this PFM is that due to capacity weaknesses in project implementation,<sup>58</sup> KP's Finance Department returned electricity dues and unutilized money received under the NFC Award during the last fiscal year under the new Government in KP.

#### 4.6 PROVINCIAL BUDGETS AND THE NFC AWARDS

Devolution following the 18th Amendment has shifted responsibility for CC delivery to the provinces (as detailed in Chapter 3). The provinces started receiving an increased share of Government revenues as a result of the seventh NFC Award (which was adopted in

March 2010 just prior to the 18th Amendment). The Award increased the magnitude of financial resource transfers from the Federal Government to the provinces and also increased provincial expenditure discretion. However, the terms of the Award were set prior to the adoption of the 18th Amendment. It therefore did not explicitly account for the additional responsibilities the provincial governments acquired, (UNDP 2013<sup>59</sup>).

Unlike with previous Awards, the allocation of the seventh Award was calculated using a number of weighting factors other than just population size. These included inverse population density, poverty and societal backwardness, provincial GDP and revenue collection and urban density. The inclusion of interpretation and weighting design based on revenue-need macro-indicators reveals the possibility for further refinement of allocation procedures. For example, in relation to CC, it would be possible to weight future Awards on the basis of provincial vulnerability assessments based on future climate scenarios. This would further strengthen the linkage between allocation and relative need between the provinces in order to optimize budget targeting.

At present, the role of CC in the provincial budget process is negligible. There are no concerted efforts on CC by the provinces; it is not a subject of priority or even a consideration, despite the fact that there are implications for impact on livelihoods, health and food security. Only projects with indirect climate benefits, like hydropower generation, are being implemented; there are no resources for well-thought-out CC-related projects. The province has other priorities like addressing the dearth of primary schools for girls.

However, one key difference to the federal situation is that CC sits in the Economic Analysis Section within the provincial P&DD and not in the Environment Department of KP; the institutional positioning of CC is directly within the social and economic development unit rather than being shrouded under environment. The mandate of the KP Economic Analysis Section is shown in Box 4

57. However, the official of KP's Finance Department stated in an interview that the province's ADP is based on the concept clearance of the projects. PC-Is of individual projects are prepared after the budget is passed by the provincial assembly. The PC-Is are sent to the PDWP which then forwards them to the Finance Department for funds release. In practice, the PC-Is are prepared as late as December of the ongoing fiscal year for projects that have been approved in the current budget. This budget process, if correct, implies a substantial departure from the Federal budget process, but resembles the 'block allocation' practice of the Federal Government.

58. Human resource shortages do not allow the undertaking of the formulation and implementation of the project.

59. UNDP Pakistan, "Strengthening participatory federalism and decentralization: Strategy paper", (United Nations publication). Available from [http://www.pk.undp.org/content/dam/pakistan/docs/Democratic%20Governance/Federalism/Final%20Strategy%20Paper%20\(SPDF\).pdf](http://www.pk.undp.org/content/dam/pakistan/docs/Democratic%20Governance/Federalism/Final%20Strategy%20Paper%20(SPDF).pdf).



## THE KP ECONOMIC ANALYSIS SECTION'S (P&DD, KP) MANDATE

### Vision 2025

- MDGs;
- CC;
- Coordinating with the Federal Government and Provincial Government departments on policy matters;
- Preparation of summary for Cabinet, development portion of budget speech and white paper.
- Coordination with district governments and provincial and national disaster management agencies
- Coordination/conducted steering committee of PERRA/Earthquake Reconstruction and Rehabilitation Authority (ERRA), review/progress monitoring of district development fund;
- Coordination/conducted steering committee of child protection with social welfare;
- UNICEF, coordination/conducted steering committee meeting of CVSP-USAID funded, coordination;
- Conducted steering committee meeting on social protection floor initiative with International Labour Organization (ILO), coordination with ILO in youth employment;
- Analysis/evaluation of public policy papers and planning and research-based assignments.

with apparent intra-institutional linkages to the overall vision, the MDGs, disaster management and social and economic policy, including social protection of vulnerable children and youth. The positioning of CC within this nexus provides a strong institutional-base for CC to be inculcated in provincial socioeconomic development, and should be optimized towards that objective.

### 4.7 EMBEDDING CLIMATE CHANGE IN BUDGET DECISION-MAKING

Positive selection towards CC-positive projects will be required for CC to gain traction and be mainstreamed through the governmental budget process, and more specifically the PSDP. Doing this in a systematic and objective way requires the use of criteria for prioritization and selection of investments across many sectors. Currently, the assessment seems to be focused on technical elements; the absence of clearly laid out prioritization criteria provides an opportunity to develop such a process in a way that makes project selection criteria climate relevant.

However, even with generic criteria that lay out the CC-related nature of investments, it is necessary for line ministries to be able to understand and

appreciate the climate challenges within their sectors, and to plan investments appropriately. Although climate is referred to in a number of key Government documents and the NCCP, it has a very low profile in the line ministries which tend to be more focused on sector policy delivery. Building CC into investment projects requires both acceptance and recognition of the level of priority of CC. Line ministries must realize CC correlation with their own interests and the technical basis for design/plan alternatives to accommodate CC. The technical basis for adaptation would be sector specific and link climate projections with planning horizons. It would then identify suitable climate-proofed or climate-sensitive design modifications or approaches. For mitigation, technical inputs would be required in the identification and uptake of low-carbon approaches through efficient energy production and distribution, energy saving and energy efficiency of industrial processes.

During interviews with officials from MCC, issues regarding communication and coordination with the MPDR were also raised. While the MCC is not involved at any stage with the line ministries or invited to the different approval forums, the MPDR sends the federal and provincial PC-Is to the NAMA office for assessment as it lacks the technical



expertise to perform the assessment itself. This is an informal arrangement of collaboration between the MCC and the MPDR. However, it is a demonstrative example of how CC-positive investments can be screened and prioritized; it highlights the potential role of the MCC and how it could be institutionalized into the budgetary process.

The pivotal decision-making point within the process of finance allocation for development investments has to be the Priorities Committee. This is headed by the Finance Secretary and has representation for the MPDR and the relevant ministry (whose projects are being discussed). Its role is to discuss and recommend the scheme-wise and overall allocation of the PSDP for the next year to the APCC. The ministry in question may also invite technical ministries. However, this is not usually done.

Equally important is the stage of the meeting of the ECNEC, since it not only recommends very large projects, but is represented by a mix of political and administrative decision-makers. Any exercise with them for sensitization on CC will have far-reaching dividends. Given that project approval is being done at the department level,

the DDWP and CDWP may also be considered important for sensitization. Moreover, the members of the DDWP and CDWP are also involved in formulation and/or approval of larger projects as well for their respective departments, or, in the case of the CDWP, their relevant sections. It is, therefore, important that the PC-I document clearly articulates the link to CC. However, in order to understand and effectively respond to a PC-I section outlining the technical CC-related aspects of the proposed development project, the relevant ministries will need the checklist, guidance and capacity building for its use. The exercise may start with the two ministries (federal level) and two departments (KP) with the largest number of relevant projects.

As things stand, the MTBF is even more significant than the MPDR plans as a key document where climate relevance can be reflected. At the same time, within the current structure of the MTBF, the financing is top-down (budget limits) while the planning is bottom-up (outcomes and outcome indicators), so sector policies remain important. If linked properly with sector policy, the perspective plans, the periodic plans and the annual plans provide a basis of inclusion of climate relevance



in development planning. It is important to have the MoF (federal) and Department of Finance (provincial) on board to introduce climate-relevant key performance indicators (KPIs) for the MTBF. This can be further linked with the process by introducing a CC link as part of the budget call circular to complement the introduction. In the case of KP, budget call circulars already ask that proposals be in line with the provincial Integrated Development Strategy which recognizes CC as a crosscutting issue. However, this link can be made more explicit by adding an explanatory appendix for CC as part of the budget call circular link.

#### 4.8 FINDINGS AND CONCLUSIONS

- CC is included under the 'environment' sector, and sometimes, the 'development' sector in various government documents. However, the prioritization of CC in relation to other pressing issues is low at both the federal and provincial level.
- Existing Federal and Provincial Government processes have the potential to be strengthened to increase CC components of the budget through enhanced prioritization and selection of development projects.
- The three selection committees and Priorities Committee are vital in determining the portfolio of development investments. The lack of concrete investment selection criteria and the dispersed nature of the CC response can undermine positive CC budgeting.
- Technical challenges exist for embedding CC in development projects at the line ministry level in terms of robust climate proofing for adaptation and managing technological upgrades for mitigation outcomes.
- The existing MTBF process can be strengthened to include CC. However, within MTBF planning, ministries will tend to concentrate on their own key sector policies as the main drivers for the derivation of their investments. Thus, the MDPR and MoF need to ensure that CC outcomes are robustly built into the MTBF financial planning system.
- Institutionally, the MCC is well-placed to champion CC if leadership, capacity building and coordination can position CC as an entity outside and beyond environment, but within government planning processes.





05

# METHODOLOGY FOR DETERMINING THE CLIMATE BUDGET

## 5.1 CLIMATE BUDGET AND AIMS

The CPEIR methodology has developed from World Bank work on PERs, Public Expenditure and Institutional Reviews (PEIRs) and Public Environment Expenditure Reviews (PEERs). These approaches provided the national Government with a review of aggregate spending and allocation in key sectors such as health and education in order to improve allocation and policy delivery. The CPEIR has a similar role - to aggregate spending across the area of CC, to provide information on spending and allocation and to link this to policy objectives. However, the CPEIR approach is made more challenging because of the disaggregation of expenditure across many government bodies as well as the climate-beneficial responses sitting within business-as-usual activities in those sectors.

Similar to PERs, the climate budget emerging from the CPEIR is not just a single figure or percent of national budget related to CC response. Linking climate expenditures to the key bifurcation in the CC response (adaptation and mitigation), to multiple policy objectives and to involved institutions, requires a climate budget that can be disaggregated into various sub-budgets which may be related, for example, to sector, intervention type or policy objective. Linkages to policy and institutional domains can be made through this disaggregation of the overall climate budget. This constitutes the climate budget's primary role within the CPEIR.

In methodological terms, the climate budget is made through the aggregation of separate climate-related elements. In this study (as well as in many other implemented CPEIRs), data was collected by budget line within key line ministries and then aggregated to form an overall governmental

climate budget for the targeted institution. This basic process forms the core of the climate budget, although there are a number of complications and exclusions (see later in chapter). A three-phase process is undertaken for each budget line within the selected government bodies:

1. Identifying CC expenditure: Budget lines with an adaptation or mitigation component are selected as subsets of the overall data for further analysis.
2. Classifying CC expenditure: Budget lines are classified into one intervention type from a pre-determined list of intervention types linked to CC policy objectives.
3. Assessing climate relevance: The proportion of the expenditure of the budget line that is related to CC outcomes is determined.

Undertaking the three phases for the selected government agencies (in this case, federal and KP) builds a picture of climate-related expenditure that can be aggregated to an overall budget total or assessed through a lens of differential expenditures across institutions. The focus is on A/M and types of interventions that link to policy objectives.

The following sections provide more methodological detail on the three stages of analysis identified above. Subsequently, the forms of accessible budget data, exclusions and complications in budget terms and the treatment of the investment and recurrent budget are elaborated upon. While the basic process for the development of a climate budget is quite well-defined, data availability, accessibility, consistency and exclusions related to governmental budgets make the formation of a retrospective climate budget a relatively involved procedure.



## 5.2 IDENTIFYING, CLASSIFYING AND ASSESSING CLIMATE RELEVANCE

This section provides more detail on the manner in which expenditure line items were selected and analysed in the CPEIR budget process. Budget data is often presented in terms of short descriptions for line items. Such minimal textual descriptions can make it difficult to follow the phases outlined below. The process was carried out using expert judgement combined with consultations with various involved ministries.

### 5.2.1 Phase I - Identification of climate-related expenditures

The identification of budget lines with climate-related expenditures followed the definition of two key elements of CC: adaptation and mitigation. All selected projects budgeted expenditure items that were identified to have an aim or likely outcome (intended, or not), to:

- a) Improve resistance or resilience to present and forecast CC by protecting against negative effects on people, resources and infrastructure, or taking anticipatory action against projected future adverse effects.

and/or

- b) Reduce resource inputs and GHG emissions per unit output through technological change, substitution and carbon sequestration. This could involve reducing GHG emissions directly (e.g., renewable energy generation, energy conservation and efficiency and reduced use of fossil fuel for transport) or through carbon capturing.

Projects of a preparatory nature were also included as long as they were deemed necessary for the subsequent delivery of CC actions. Preparatory actions could include capacity building, institutional strengthening, ecosystem inventories, crop breeding programmes for climate-resilient traits and policy developments and reform process.

All CC-related expenditure lines were carried forward to the next phase.

### 5.2.2 Phase II - Classification of climate responses

Phase I identified expenditure lines related to CC

through adaptation and/or mitigation, and related preparatory activities. Phase II then classified those line items using a set of tasks determined from NCCP policy objectives. This was done to ensure a tight linkage between NCCP policy objectives and the classification of budget items.

It was recognized in phase I that some tasks could have both adaptation and mitigation components, creating the theme of A/M. The potential for such mutual joint adaptation and mitigation gains is broad and developing rapidly. It was not considered useful to limit the potential for both types of gains to a limited number of tasks within the typology. This is likely to mean that the typology would become outdated and need ongoing revision as climate innovation and implementation develops. Thus, the typology includes the possibility of joint adaptation and mitigation gains for every task. This means that a task that directly derived climate benefits (as opposed to a supporting task) could be classified as adaptation, mitigation or A/M.

Example of such tasks include (theoretically):

- Renewable energy development (mitigation) in a remote village primarily to provide electricity for groundwater pumping to maintain subsistence agricultural production (adaptation).
- The development of urban public mass transport systems (mitigation) in riverine or coastal areas on raised platforms to maintain functionality during times of floods or inundation events (adaptation).
- The development of drought-resilient fodder crops for livestock husbandry (adaptation) specifically bred to reduce GHG gas emissions from livestock digestion processes (mitigation).

A number of A/M tasks were identified in town planning and energy and transport in the work on 2013/14 budget data (Chapters 6 and 7).

The tasks and activities were divided into four themes: adaptation, mitigation, A/M and supporting areas. The supporting areas theme was included as there are many activities that relate to CC and the creation of a governance and delivery platform. These in themselves do not deliver direct adaptation or mitigation benefits. In addition, the

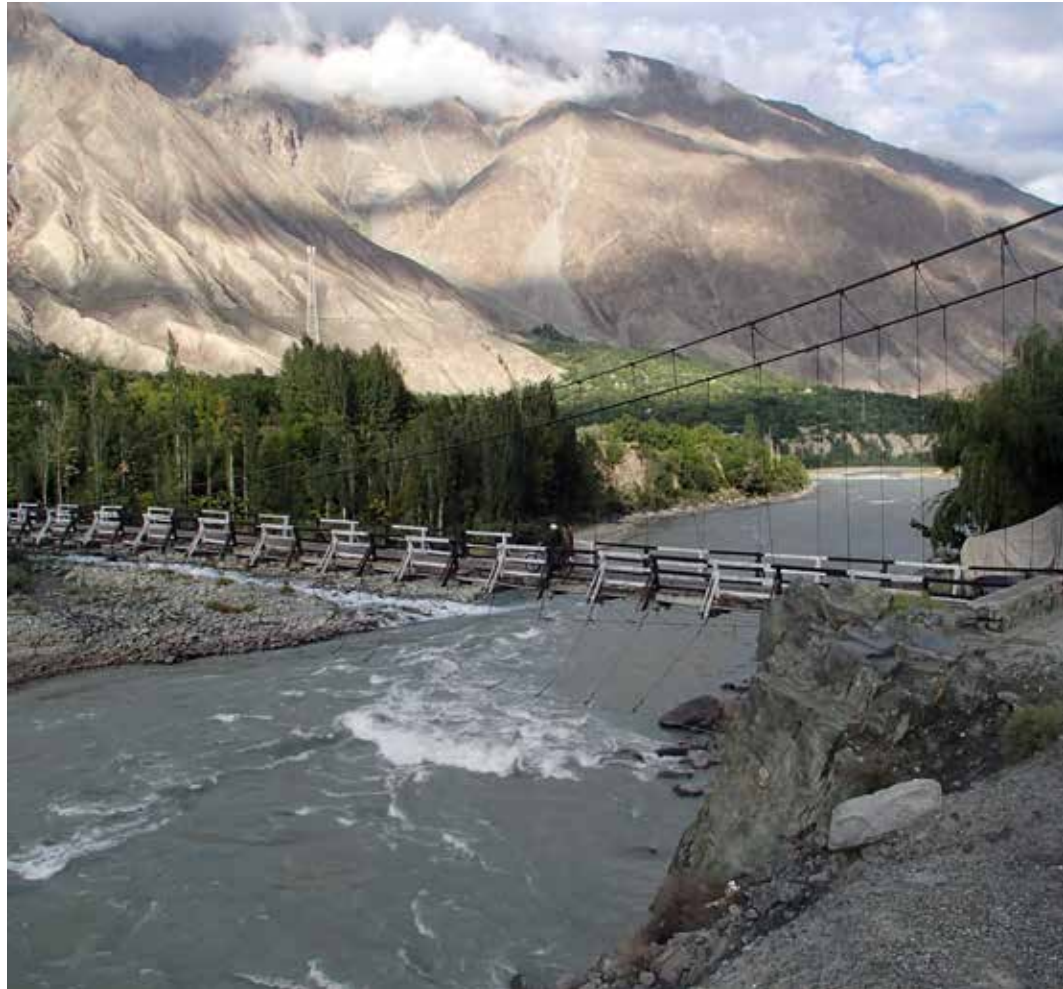
inclusion of this theme increased compliance to the structure of the NCCP as it covered the other elements without the adaptation and mitigation themes (Chapters 6–11 of the NCCP). Tasks included capacity building, international climate

negotiations and technology transfer for energy efficiency and low-carbon technologies.

Each expenditure item selected from phase I was classified on the basis of theme and task (Table 5.1).

**Table 5.1: Typology of themes, associated tasks and example activities with CC co-benefits, based on the NCCP classification of expenditures**

<b>Theme: Adaptation or A/M</b>		
<b>Task</b>	<b>Example activities</b>	
Water resources	<ul style="list-style-type: none"> <li>- Water storage and infrastructure</li> <li>- Water conservation strategies</li> <li>- Integrated water resource management</li> </ul>	<ul style="list-style-type: none"> <li>- Legislative framework</li> <li>- Capacity enhancement</li> <li>- Awareness raising</li> </ul>
Agriculture and livestock	<ul style="list-style-type: none"> <li>- Research</li> <li>- Technology</li> </ul>	<ul style="list-style-type: none"> <li>- General management</li> <li>- Risk management</li> </ul>
Health and other social services	<ul style="list-style-type: none"> <li>- Health capacity building</li> <li>- Health policy and governance</li> <li>- Other social services</li> </ul>	
Forestry	<ul style="list-style-type: none"> <li>- Awareness raising</li> <li>- Research</li> <li>- Reforms in governance</li> </ul>	<ul style="list-style-type: none"> <li>- Adaptive capacity enhancement</li> <li>- Forest management</li> </ul>
Biodiversity	<ul style="list-style-type: none"> <li>- Legal and institutional setup</li> <li>- Biodiversity research and practice enhancement</li> <li>- Enhancement of capacity for conservation</li> </ul>	
Vulnerable ecosystems	<ul style="list-style-type: none"> <li>- Mountain areas</li> <li>- Rangelands and pastures</li> <li>- Arid and hyper-arid areas</li> </ul>	<ul style="list-style-type: none"> <li>- Coastal and marine</li> <li>- Wetlands policy</li> </ul>
Disaster preparedness	<ul style="list-style-type: none"> <li>- Risk knowledge and response capacity</li> <li>- Early warning improvements</li> </ul>	<ul style="list-style-type: none"> <li>- Climate-resilient infrastructure</li> <li>- Hazard mitigation</li> </ul>
<b>Theme: Mitigation or A/M</b>		
Energy	<ul style="list-style-type: none"> <li>- Clean energy technologies</li> <li>- Energy conservation and power efficiency</li> <li>- Hydropower and other renewables</li> </ul>	<ul style="list-style-type: none"> <li>- Green growth and fiscal reforms in the energy sector</li> <li>- Electricity transmission and distribution</li> </ul>
Transport	<ul style="list-style-type: none"> <li>- Research and development</li> <li>- General transportation</li> <li>- Rural and inter-urban roads and highways</li> <li>- Urban transport</li> </ul>	<ul style="list-style-type: none"> <li>- Aviation</li> <li>- Railways</li> <li>- Inland waterway transport and ports and shipping</li> </ul>
Town planning	<ul style="list-style-type: none"> <li>- Policy and public administration</li> <li>- Research and development</li> </ul>	<ul style="list-style-type: none"> <li>- Solid waste and wastewater collection management</li> <li>- Infrastructure</li> </ul>
Industries	<ul style="list-style-type: none"> <li>- Policies and regulations</li> <li>- Research and development</li> </ul>	<ul style="list-style-type: none"> <li>- Capacity building and technology transfer</li> <li>- General industries and trade</li> </ul>
Agriculture and livestock	<ul style="list-style-type: none"> <li>- Research</li> <li>- Management practice improvements</li> </ul>	
Carbon sequestration and forestry	<ul style="list-style-type: none"> <li>- Policy and governance</li> <li>- Access to international carbon financing</li> <li>- Reforestation</li> </ul>	
<b>Theme: Supporting areas</b>		
Capacity building and institutional strengthening	<ul style="list-style-type: none"> <li>- Institutional mechanisms</li> <li>- Capacity enhancement</li> </ul>	
Awareness raising and education	<ul style="list-style-type: none"> <li>- Awareness raising</li> <li>- Education</li> </ul>	
International and regional cooperation	<ul style="list-style-type: none"> <li>- CC negotiations</li> <li>- Cooperation in research and development</li> </ul>	
Finance and technology transfer	<ul style="list-style-type: none"> <li>- Climate financing</li> <li>- Technology transfers</li> </ul>	



Each development budget line was classified to a theme (adaptation, mitigation, A/M or supporting) and to a climate-related task by the end of phase II.

### 5.2.3 Phase III - Determining the climate relevance of expenditures

The third phase of the expenditure line analysis determined the climate relevance of expenditures, which was expressed as a percentage of the total expenditure attributed to CC. Very few climate-relevant projects identified in phase I are completely directed at CC outcomes. This is a consequence of the situation that much of the climate response sits within business-as-usual activities (e.g., irrigation, hydropower schemes) which have sector-related objectives (e.g., agricultural production, power generation) as well as climate benefits (e.g., drought-resistant crops,

low-carbon/renewable energy production). The creation of a climate budget must try to include climate-related components, but exclude non-climate-related components.

Similar to many previous CPEIRs, categories related to expenditure were ranked from highly-relevant (75 percent+ of expenditure line item predicated on CC) to marginally relevant (< 25 percent) items. A rationale for the high, medium-low and marginal categories was established, and possible examples of the types of expenditures were placed in each category.

Phase III provided the percentage climate-related component of each budget line which then formed the base data for collation to ministry, theme/task/activity or policy objective. Some projects are fully focused on CC whereas others may have small or indirect CC benefits. Table 5.2 provides a rationale for each category of CC relevance with examples.

**Table 5.2: Pakistan climate classification**

Highly relevant	Rationale	Clear primary objective of delivering specific outcomes that improve climate resilience or contribute to mitigation.
Climate relevance weight, 75% +	Examples	<ul style="list-style-type: none"> <li>• Energy mitigation (e.g., renewables, hydropower and nuclear, and energy efficiency)</li> <li>• Disaster risk reduction and disaster management capacity, particularly flood and drought risk reduction and management actions.</li> <li>• Forestation and conservation of protected areas.</li> <li>• Management, research and construction of water resources and infrastructure, including water reservoirs to combat increasing variability in drought and floods.</li> <li>• Actions taken in response to recent flooding/droughts, because they will have added benefits for future extreme events.</li> <li>• Relocating villages to provide protection against climate stresses (droughts, floods and sea level rises).</li> <li>• Health care directly associated with climate-sensitive diseases.</li> <li>• Building institutional capacity to plan and manage CC, including early warning systems and monitoring.</li> <li>• CC awareness raising.</li> <li>• Actions meeting the criteria of CC funds (e.g., the Green Climate Fund [GCF], the Global Environment Facility [GEF], Pilot Programme for Climate Resilience [PPCR]).</li> </ul>
Medium relevance	Rationale	<ul style="list-style-type: none"> <li>• Either secondary objectives related to building climate resilience or contributing to mitigation, or mixed programmes with a range of activities that are not easily separated, but include at least some that promote climate resilience or mitigation</li> </ul>
Climate relevance weigh, 50–74%	Examples	<ul style="list-style-type: none"> <li>• Forestry and agro-forestry that is motivated primarily by economic or conservation objectives, because this will have some mitigation effect.</li> <li>• Watershed management, waterworks rehabilitation, water storages, water efficiency, water conservation, irrigation and canal lining - motivated primarily by livelihood improvements but will also provide protection against droughts.</li> <li>• Biodiversity and conservation, unless explicitly aimed at increasing resilience of ecosystems to CC (or mitigation).</li> <li>• Population control programmes, livelihood and social protection programmes, motivated by poverty reduction, but building household reserves and assets and reducing vulnerability.</li> <li>• Civil defence facilities enhancement actions that can contribute to DRR.</li> <li>• Restructuring of production technology in industry, building and transportation towards low-carbon intensity.</li> <li>• Education and research in agriculture, veterinary and animal sciences and environmental sciences. This can contribute to food security under climatic stresses.</li> <li>• Energy distribution system improvements.</li> </ul>
Low relevance	Rationale	<ul style="list-style-type: none"> <li>• Activities that display attributes where indirect adaptation and mitigation benefits may arise</li> </ul>
Climate relevance weight, 25–49%	Examples	<ul style="list-style-type: none"> <li>• Water supply and water quality schemes unless improvements in water quality aim to reduce problems from extreme rainfall events, in which case relevance would be high.</li> <li>• Sanitation-sewerage schemes. Space, marine and dairy animals research programmes and education to hard-pressed areas.</li> <li>• General planning capacity enhancement, either at national or local level, unless explicitly linked to CC, in which case relevance would be high.</li> <li>• Road construction with identifiable elements of climate proofing.</li> <li>• Livelihood and social protection programmes motivated by poverty reduction (zakat, Poverty Alleviation Fund, Benazir Income Support Programme [BISP]), but building household reserves and assets and reducing vulnerability.</li> <li>• Strengthening, improvement and rehabilitation of road infrastructure. Road and bridges reducing distances travelled. Roads in difficult areas- mountain areas, coastal areas.</li> <li>• Rehabilitation of flood damages. Urban storm drainage schemes.</li> <li>• Food security, drought recovery and satellite programmes.</li> <li>• Mass transit systems, railways.</li> <li>• Bridges over rivers, reducing distances.</li> </ul>
Marginal relevance	Rationale	<ul style="list-style-type: none"> <li>• Activities that have only very indirect and theoretical links to climate resilience, or small elements/components of the investment which have a direct effect on CC.</li> </ul>
Climate relevance weight less than 25%	Examples	<ul style="list-style-type: none"> <li>- International trade promotion.</li> <li>- Education, research and health initiatives that do not have an explicit CC element.</li> <li>- Road investment with no particular climate proofing.</li> <li>- Infrastructure development of which particular small aspects require climate proofing.</li> <li>- Energy with no explicit objective of reducing emissions.</li> <li>- People work and Tameer-e-Watan programmes or area development funds.</li> </ul>

### 5.3 THE COVERAGE OF THE CLIMATE BUDGET

The climate budget presented in this study is not a complete budget of climate response in Pakistan. First, it focuses on governmental expenditure and excludes private sector and NGO expenditures and some development partner expenditures that flow to standalone activities. Second, the study includes only one province (KP) for analysis, thus excluding other provinces' contributions.<sup>60</sup> However, it

does provide an indicative climate budget for all of federal expenditure (including federally administered tribal regions).

To deliver, the Federal and KP climate budgets require expenditures in a range of government institutions to be covered. Tables 5.3a and 5.3b show the institutions that were included in the analysis at the federal and KP level, which, as far as could be determined, constitute nearly 100 percent of the climate-relevant expenditure of the Federal Government and KP.

**Table 5.3a: Federal-level institutions included and excluded in climate-relevant analysis, 2013/14<sup>61</sup>**

Climate-relevant institutions in 2013/14	Institutions without any climate-relevant projects in 2013/14
Cabinet Division, ERRA, AEC	Commerce Division
Capital Administration and Development Division	Defence Production Division
CCD	Federal Tax Ombudsmen
Communications, NHA Division	Foreign Affairs Division
Defence Division, Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)	Human Rights Division
Economic Affairs and Statistics Division	Law, Justice and Parliamentary Affairs Division
Finance/Revenue/Economic Affairs/Statistics Division/P&DD	Pakistan Nuclear Regulatory Authority
Higher Education Commission (HEC)	Production Division
Industries Division	Textile Industry Division
Information Technology and Telecommunications Division	
IPC Division	
Interior and Narcotics Control Division	
Kashmir Affairs and Gilgit-Baltistan Division	
National Food Security and Research Division	
National Health	
National Heritage and Integration Division	
Professional and Technical Training Division	
Petroleum and Natural Resources Division	
Railways Division	
Science and Technological Research Division	
States and Frontier Regions Division	
Water and Power Division (water and power sector)	
Housing and Works Division	
Ports and Shipping Division	

60. The total share of all four provinces in federal revenue receipts was 39 percent in 2013/14, as per the NFC Award. KP's share was 17 percent of the total provincial share. In addition, KP irregularly receives grants and loans from the Federal Government and direct donor funding guaranteed by the Federal Government. KP's share of the four provinces in total spending (revised current plus development expenditure) in 2012/13 was 15 percent.

61. Federal macro-shares (in Chapter 6) indicating climate-relevant budget shares account for the budget of all climate- and non-climate-relevant Federal ministries and divisions. Moreover, the number of climate- plus non-climate-relevant Federal ministries varied during the four years due to devolution and mergers and the re-emergence of ministries under new names following the passage of the 18th Amendment.



**Table 5.3b: Provincial-level (KP) institutions included and excluded in climate-relevant analysis, 2013/14<sup>62</sup>**

Climate-relevant institutions in 2013/14	Institutions without any climate-relevant projects in 2013/14
Environment and Forest Department	Building and Housing
Finance Department	Drinking Water and Sanitation
Food Department	Auqaf, Hajj and Minority Affairs
Health Department	Research and Development
Higher Education Archives and Libraries	Urban Development
Industry, Commerce, Labour, Mineral Development and Technical Education	Transport
Information and Public Relation Dept.	Housing
Irrigation and Power Dept.	Home
Local Government, Election and Rural Development Department	Law and Justice
P&DD	
Population Welfare Dept.	
Schools and Literacy Dept.	
Sports, Culture and Youth Affairs Dept.	
Works and Services Dept.	
Zakat, Ushr, Social Welfare and Women Development Dept.	
Science and Technology and Information	
Relief, Rehabilitation and Settlement Dept.	

## 5.4 BUDGET DATA SOURCES

There are three data sources for collecting Federal Government expenditure information in Pakistan:

1. The MPDR publishes a comprehensive list (the PSDP) of ongoing and new projects disaggregated by ministry/division along with sanctioning date, estimated cost, cumulative expenditure incurred till the current fiscal year in local rupees, foreign official project funding (multilateral and bilateral), throw-forward remaining expenditure, and allocations including foreign official project funding (BE) for the next fiscal year for each project. It listed on average 1,000–1,500 new plus and ongoing projects in the last four years (2010/11, 2011/12, 2012/13 and 2013/14). This document is published in the last month of the current fiscal year and lists the cumulative expenditure to date on each of the projects as estimates rather than as actual expenditure.
2. The MoF (GoP) publishes two budget documents separately titled, the 'Federal Budget Details of Demand for Grants and Appropriation' for development expenditure and for current expenditure, annually. The development expenditure is listed by ministry/division. The total development expenditure of each ministry/division is broken down by functional and object classification as per the New Accounting Model (NAM) introduced in 2004/05. The total development expenditure of each ministry/division is also broken down by project with a unique ID for each project, and then again by object classification. Budget and revised estimates of expenditure in the current fiscal year and BEs of the new fiscal year are given against each line item. The current expenditure information compiled in the 'Federal Budget Details of Demand for Grants and Appropriation' for current expenditure is also broken down by ministry/division. However, but within each ministry/division, the information on various heads (salaries, pensions, repair and maintenance, travel) is broken down by various sub-departments, sub-offices and sub-entities, location-wise rather than by projects.
3. The CGA of Pakistan "has been entrusted with the task of producing timely and accurate financial statements of the federation". Three

62. The number of departments in KP follow the CGA classification. It does not exactly match the classification used in the KP Annual Budget Statement.

to four months into the new fiscal year, the CGA publishes the development expenditure (project-wise inclusive of foreign project funding) and current expenditure (ministry and division-wise) of the Federal, Provincial and Federal Areas (AJK, GB, FATA) according to NAM classifications. Three types of data, namely, budget, revised expenditure and actual expenditure, of each line item for the outgoing fiscal year are given.<sup>63</sup> These are audited accounts and presented to the PAC of the Parliament. Although most of the Federal ministries/divisions and provincial/regional departments are legally mandated to send their detailed expenditure accounts to the

CGA for auditing, 'exempt' and 'self-accounting' entities using their own accounting and internal auditing systems send just summary expenditure accounts to the CGA (Table 5.4).

It should be noted that the list of exempt and self-accounting entities include Federal ministries/divisions/authorities that have CC-relevant investments and also undertake big-ticket investment expenditures, e.g., WAPDA (power sector) or their overall investment budget is sizeable, but spread over many small projects, e.g., the National Highway Authority (NHA) and the Higher Education Commission (HEC).

**Table 5.4: List of exempt and self-accounting entities**

Exempt entities	Self-accounting entities
<ul style="list-style-type: none"> <li>• WAPDA (Power Sector)</li> <li>• Oil and Gas Authority</li> <li>• National Highway Authority</li> <li>• National Mass Transit Authority</li> <li>• All Government corporations, listed companies and others</li> <li>• Entities required to prepare reports under the Companies Ordinance, 1984</li> </ul>	<ul style="list-style-type: none"> <li>• National Saving Organization</li> <li>• Pakistan Mint</li> <li>• Food Wing of the Food and Agriculture Division</li> <li>• Pakistan Public Works Department</li> <li>• Ministry of Foreign Affairs</li> <li>• Geological Survey of Pakistan</li> <li>• Pakistan Railways</li> <li>• Forest Department</li> <li>• Ministry of Defence</li> <li>• HEC</li> </ul>

This review extracted four years of BEs and actual expenditure data from the CGA appropriation accounts for projects in the development budget and ministry/division-wise data for the current budget.

The relevant ministries/divisions listed in the PSDP are used to extract four years of data for projects that are executed by exempt/self-accounting entities, which include WAPDA (Power Sector), the Food Wing of the Food and Agriculture Division, the Geological Survey of Pakistan, the Pakistan Public Works Department, Pakistan Railways, the Forest Department and the Ministry of Defence. One-line information on development (investment) expenditure provided by the CGA is used for the HEC. The NHA shared project-wise budgeted and actual expenditure data for four years.

Ministry/division-wise BEs and actual current expenditure data provided by the CGA appropriation accounts are used for current expenditure. The CGA also provided one-line current expenditure data for most (except WAPDA

and the NHA) of the exempt and/or self-accounting entities. The NHA shared current budgeted and actual expenditure data, and the HEC data series for current budgeted and actual expenditure was downloaded from its website. WAPDA (Power), as an exempt entity, did not share its current expenditure, so one-line current expenditure data from the CGA was used instead.

The current expenditure data provided by the CGA for the MoF and Economic Affairs Division included current expenditure of non-climate-relevant entities, namely, the National Saving Organization, the Pakistan Mint and expenditure heads such as domestic debt servicing. The CGA current expenditure data on the Economic Affairs Division included current expenditure on servicing and repayment of principal of foreign debt (short and long term).<sup>64</sup> Similarly, the Ministry of Defence included expenditure on the Armed Forces. From MoF publications (source 2 above), the expenditures on the above budget headings are subtracted to arrive at current expenditure

63. It is noteworthy that a sizeable number of foreign-funded vertical projects in social sectors (such as the Benazir Income Support Programme (BISP)) are treated as 'current expenditure on capital account' in source 2 above and line item of the MoF's current expenditure by source 3 above.

64. The current expenditure data on debt servicing runs into trillions of Pakistani rupees.

for each relevant ministry. The percentage of trimmed expenditure is then applied to CGA actual expenditure to obtain current expenditure for the respective ministry.

## 5.5 FINANCIAL DATA ANALYSIS AND ASSUMPTIONS

### 5.5.1 Development budget

The CGA provided the development (inclusive of foreign official project funding) and current budget appropriation accounts as softcopy spreadsheets. Both CGA and PSDP CC-relevant projects along with classification and CC-relevant weights (Phases I–III) were filtered by ministry/division. Project data from the NHA was incorporated by the team's CC expert.<sup>65</sup> This exercise proved challenging as data for the four years did not follow a consistent accounting format or pattern across ministries, divisions and projects. This was due to weak inter-provincial coordination and a lack of ownership of ministries and their projects by the provinces in the aftermath of the 18th Amendment. The difficulties were as follows:

- The initial devolution of ministries and projects led to a reduction in historical ministries and projects in the federal budget;
- Devolution meant the re-allocation of ministries and projects and considerable re-thinking and compromise at the federal level, leading to the re-emergence of devolved ministries/divisions under a different nomenclature and modified powers and objectives. This again led to the re-emergence of more ministries/divisions along with the re-allocation of projects (previously allocated to the provinces) to the federal budget.

In step two, actual expenditures in a given year on CC-related projects belonging to exempt/self-accounting entities were calculated from data in the PSDP. The formula was the difference of 'actual expenditure till the end of the fiscal year t' minus the 'actual expenditure till the end of the fiscal year t - 1' from two consecutive PSDP publications. This was calculated and treated as actual expenditure

in year t. The MPDR official indicated that the 'actual expenditure till the end of the fiscal year t' is an estimate as it is an extrapolation of nine-month actual expenditure. This renders the actual expenditure calculated from the PSDP source during the year, an estimate as well. However, it is close to actual expenditure in many cases. Allocations during the year against each project are considered equivalent to BEs given in the MoF publications.

In step 3, after combining the CGA and PSDP climate-relevant projects, the CC-relevant BE and actual expenditure were calculated by multiplying the total current year BE and actual expenditure on the project by its CC-relevant weight. This exercise was repeated separately for all four years.

In step 4, the summary development (investment) statistics of certain indicators were prepared by summing individual projects ministry/division-wise. These indicators were total BE and actual expenditure, CC-related BE and actual expenditure, two ratios of CC-related BE and actual expenditure to total BE and actual expenditure. After aggregating CC-related investment expenditures during a given year across all ministries/divisions, two ratios of CC-related BE and actual expenditure in each ministry/division to total CC-related BE and actual expenditure in a given year were calculated. Dividing aggregate CC-related yearly actual expenditure by yearly size of PSDP yields investments in CC projects as a ratio of the PSDP.

### 5.5.2 Current budget

The two data sources for the Federal Government's current budget (which constitutes 70–80 percent of the total budget) are the CGA appropriation accounts (source 3 above) and the MoF (source 2 above). Although both sources document detailed current expenditures by ministry/division according to NAM classifications, it is almost impossible to identify CC-related current expenditure within each federal ministry/division.

CC-related current expenditure is estimated by assuming that ministry/division-wise CC yearly current expenditure is proportionally related to

65. Projects with the same name appearing more than once in the same or different ministries were filtered out. These filtered projects from CGA accounts were crosschecked with unique project ID information, name and current year budget estimate information in the MoF's Pink Book, and then reduced to unique and single IDs and names. These were then allotted to a single ministry/division in the CGA's main spreadsheets.

66. Admittedly, this highly-simplifying assumption is open to question and subject to empirical validation.





the CC-related yearly development expenditure.<sup>66</sup> As a first approximation, the ratio of CC-related development expenditure to total development expenditure of each ministry/division (calculated in step 4 above) is applied to total current expenditure of the corresponding ministry to obtain CC-related yearly current expenditure. <sup>67</sup>CC-related BE of the current expenditure is also obtained using this method.

This process makes a significant assumption that the development and current budget are substantively related. There are a number of reasons why this may not be the case. For example, the current budget is predicated on previous development expenditures, which, historically possessed less climate relevance than the present development portfolio. However, no sufficiently robust alternative approaches could be determined to assess the climate relevance of the current budget.

In step 5, the aggregate CC actual development

and current expenditures were combined to focus on total actual CC expenditures in a given year. Dividing the total actual CC expenditures by the total size of the federal budget gives a unique estimate of yearly CC-related actual public spending at the federal level as a percentage of the total federal budget. A similar percentage can also be calculated for CC BE of current expenditures.

## 5.6 THE FINAL CLIMATE BUDGET DATASET

The final data used by the methodology was as follows:

- All climate-related expenditure at the federal and KP provincial level;
- Coverage of the period 2009–2013;
- Coverage of both development and current budgets;
- Classification of all climate-related investments into themes, tasks and activities.

67. Weighting by number of projects in each ministry/division can also produce another estimate of current expenditures.





06

# FEDERAL-LEVEL CLIMATE CHANGE BUDGET AND INSTITUTIONAL ASSESSMENT

## 6.1 FEDERAL BUDGET OVERVIEW

A brief profile of Pakistan's Federal budget of the last four years is provided to put into context the scale and trends in major heads of federal expenditures, revenues and foreign resources. The budgeting paradigm of fiscal federalism followed in Pakistan entitles provinces to a share of resources from tax and non-tax revenues collected and foreign development/non-development inflows received by the Federal Government. The budgetary profile is based on the MoF's yearly document, the 'Budget in Brief' that publishes budget and revised estimates. In order to build trends and a profile, revised estimates are

frequently used as they are based on 9-month estimates and are closer to actual estimates.<sup>68</sup>

The overall size of the federal budget in nominal terms as per revised estimates increased from PKR 2,559 million in 2010/11 to PKR 4,057 million in 2013/14, indicating an average annual growth rate (AAGR) of 11.5 percent (Table 6.1). This growth in expenditures was only marginally higher than the average annual inflation rate of 10.75 percent during the period. Only in 2011/12 did the revised expenditures substantially overshoot the BEs as the Federal Government allocations compensated for the inflationary shock during the period 2009/10–2011/12.

**Table 6.1: Overview of the federal budget, 2010/11–2013/14**

Year	Budgeted expenditures	% changes in budgeted expenditures	Revised expenditures	% changes in revised expenditures	Rate of inflation CPI	Revised expenditures as a % of GDP
2010/11	2,422,822	-1.60	2,559,367	-1.01	15.5	15.10
2011/12	2,766,815	13.26	3,109,732	21.00	11.5	15.10
2012/13	3,202,999	15.76	3,478,353	11.85	7.5	15.20
2013/14	3,985,437	24.43	4,057,293	14.27	8.5	16.00

During the last four years, the share of federal current expenditures in total federal expenditures moved in the range of 79–90 percent, indicating the tight fiscal space available to the Federal Government to spend on development activities. However, the AAGR of development expenditures

was 29.5 compared to the 8.5 percent of current expenditures during the last four years.

Table 6.2 gives a summary breakup in percentage shares of revised estimates of federal expenditures under broad expenditure heads.

68. Actual estimates of major categories of public finance line items are available in select publications and usually come with a one-year lag.



**Table 6.2: Share of main expenditure heads in the revised federal budget (percentage)**

Federal budget share	2010/11	2011/12	2012/13	2013/14
Current expenditure <sup>69</sup>				
Interest payment/foreign loans repayment	37	37	42	45
Defence affairs and services	19	19	20	20
Grants and transfers and subsidies	30	30	24	21
Running of civil government	9	8	9	8
Development expenditure				
Federal PSDP	74	64	68	49
Development loans and grants to provinces	8	11	13	17
Other development expenditure (outside PSDP)	17	25	19	34
Current expenditure as % of total govt. expenditure	90	85	84	79
Dev. expenditure as % of total govt. expenditure	10	15	16	21
PRSP expenditures as % of total govt. expenditure	59	62	55	48

The share of current expenditure going to interest payments on domestic and foreign debt is fairly large and has increased in the last four years. The expenditure on defence, though a significant portion at 19–20 percent of the total current expenditure, remained stable. The Federal Government substituted straight grants and transfers to the provinces by development loans over the last four years. Consequently, the share of grants and transfers declined in current expenditure and increased in the development expenditure.<sup>70</sup> Note that the resources devoted to the running of the Government are stagnant at 8–9 percent. In the last four years, the share of expenditure through the PSDP declined sharply from three-fourths to nearly half while the outside PSDP development expenditure doubled from 17 to 34 percent. This may again be partly due to expenditures on infrastructure reconstruction due to floods in 2010 and 2011, infrastructure for enhancing security and new development initiatives backed by foreign funding. The rising trend of the share of development expenditures is a mirror image of a falling share of current

expenditures during the last four years.

Pakistan became a recipient under the World Bank/IMF crafted PRSP lending programme at the beginning of the millennium. A detailed accounting system was set up in the PRSP Secretariat established in the MoF. It was operationalized to monitor and track multilateral and bilateral foreign funding into the pro-poor sectors of the economy. The overall spending (development and current) in pro-poor sectors as a ratio of total Government spending fluctuated along a declining trend in the last four years.

Pakistan's tax-GDP ratio is the lowest among the comparable per-capita income developing countries. Moreover, its annual import requirements outstrip its export earnings. Therefore, Pakistan remains a resource-constrained (rupee as well as foreign exchange) economy dependent on foreign flows in the shape of loans, foreign investment, aid or grants. The GoP's budget dependence on external resources (excluding foreign investment) for development purposes can be gauged from Table 6.3.

**Table 6.3: Contribution from external resources to the revised budget**

	2010/11	2011/12	2012/13	2013/14
External resources as % of overall Government expenditure	14	8.3	8.3	17.6
External resources for development as % of development budget <sup>71</sup>	110	47.3	42.6	83.2
Project aid as % of total external resources	29.5	71.2	71.2	24.4

69. The total of current expenditures do not add up to 100 percent as two minor categories, i) pensions and ii) provisions for pay and pension reforms are omitted.

70. However, a large portion of the two heads in the current and development budgets go to non-provincial entities and other heads, e.g. subsidized interest on popular credit schemes.

71. This includes project aid, commodity aid and other aid. The data was found from various annual issues of the MoF's "Summary of Foreign Assistance".

All three ratios fluctuated considerably during the last four years. Factors that may have led to the observed fluctuations include the absence of World Bank/IMF lending programmes, development partners falling behind their commitments due to recessionary conditions, and limited capacity (financial, administrative and human) and lags encountered by the GoP in executing projects.

A snapshot of trends in resource mobilization and their distribution among the federation and provinces completes the flip side of the budgetary equation. Table 6.4 shows resource mobilization and its distribution among the federation and four provinces. Total Federal receipts (tax and non-tax) increased from PKR 2.2 trillion in 2010/11 to PKR 3.6 trillion in 2013/14, representing an AAGR of 11.9 percent. Non-tax revenue collections grew at a rate of 16.6 percent compared to the growth of tax revenues at 10.1 percent during the period. A major portion of non-tax revenue comprises license fees and charges in the telecommunications sector, gas development charges, foreign grants

and royalties on crude oil. The Federal Government is left with net revenue receipts after giving the provinces their share of gross receipts under the seventh NFC Award (2009).

The Federal Government's net revenue receipts increased at an average annual rate of 14.2 percent compared to the growth rate of 9.2 percent in the provincial share. Though overall provincial share (statutorily fixed) was meant to increase from 56 percent in 2010/11 to 57.5 percent in 2013/14, revised BEs indicate that the provinces' share remained in the range of 39–48 percent during 2011–2014.<sup>72</sup> The inter-provincial share is determined by a formula composed of weights to factors such as population, poverty/backwardness, revenue collection and inverse population density. The trends indicate that shares across the four provinces continue to remain stable as per the agreed formula in the NFC Award. As per the formula, KP receives 17 percent of the provincial share.

**Table 6.4: Federal resource mobilization and provincial shares**

Federal resource mobilization and provincial shares (revised estimates)	Revised estimates in PKR millions			
	2010/11	2011/12	2012/13	2013/14
Tax revenue	1,679,363	2,024,568	2,124,575	2,513,945
Non-tax revenue	556,526	512,184	711,987	1,083,197
Total revenue receipts	2,235,889	2,536,752	2,836,562	3,597,142
Provincial share	997,700	1,208,616	1,221,022	1,413,335
Net revenue receipts	1,238,189	1,328,136	1,615,540	2,183,807
Provincial share as a % of total revenue receipts	45.0%	48.0%	43.0%	39.0%
Net revenue receipts as a % of total revenue receipts	55.0%	52.0%	57.0%	61.0%
Distribution of provincial share (%)				
Punjab	46.0%	48.0%	47.0%	47.0%
Sindh	28.0%	26.0%	27.0%	27.0%
KP	16.0%	16.0%	17.0%	17.0%
Balochistan	10.0%	9.0%	9.0%	10.0%
Overall fiscal deficit as a % of GDP	6.5%	6.8%	8.2%	6.3%

72. One reason for lower provincial shares compared to statutorily-fixed shares in the divisible pool is that Sindh challenged the Federal Government's right to collect GST on services on behalf of the four provinces in 2011/12. The Federal Government eventually acceded to the province's constitutional right to make the collection itself.

What do the aforementioned macro-trends of the federal budget portray in terms of fiscal space available to the Federal Government for CC response? From an investment angle, the growth in development expenditures is fairly respectable and nearly three times the growth in current budget. A slowly increasing share of climate response is embedded in the investment of projects related to energy, agriculture and communications. However, the increasing share of investment spending outside the PSDP versus PSDP-budgeted investment indicates that short-term priorities override planned policy aligned-allocations, undermining the formal process of PSDP formulation with a probable consequential fall out for increasing explicit investment in climate-related projects.

In terms of budgeting higher current expenditure for climate response, the trend indicates that the

current budget is overstretched with only 8–9 percent allocated to the running of the Federal Government and a large part committed to non-discretionary expenditures. Effective climate response will require increasing technical and professional capacities of existing human resources as well increasing the pool of human talent and allied supporting infrastructure. Thus, the challenge for planning and finance officials is to mainstream CC into the current budget.

## 6.2 CLIMATE PROGRAMMES AND BUDGETS

Based on the methodology and sources outlined in Chapter 5, individual climate projects/programmes are identified at the first stage from CGA and PSDP data. CC-related expenditures as a percentage of the budgets for the period under consideration are shown in Table 6.5.

**Table 6.5: Federal Government summary results - CC-related expenditures**

PKR millions	2010/11	2011/12	2012/13	2013/14
Total CC-weighted actual expenditures - (a)	192,048.26	199,330.07	196,733.42	243,400.49
Total revised budgetary expenditure - (b)	2,537,438.00	3,057,334.00	3,402,848.00	3,912,945.00
Ratio - (a)/(b)	7.57%	6.52%	5.78%	6.22%

It is pertinent to mention that identifying CC projects and climate-related expenditures is a subjective and judgmental task in the absence of any agreed upon accounting definitions for the functional classification of CC-related expenditures in use by the GoP<sup>73</sup>. Table 6.6 gives a four-year

summary trend profile of a number of climate-related projects identified from CGA and PSDP data (for ministries that possess complete four-year data).<sup>74, 75, 76</sup> The details of all ministries are provided in Appendix 6.1.

73. The Chart of Accounts, 2002 provides codes for environmental protection. Six codes are mentioned under the minor functional classification and another ten are mentioned under the sub-detailed functional description. However, the word, 'climate' and other related codes are not found in the Chart of Accounts.

74. A complete profile of climate-related projects for all ministries/divisions is included in Appendix 6.1.

75. It should be mentioned that the 18th Amendment led to considerable reshuffling, bifurcation, merging, renaming and devolution of Federal ministries and divisions during this four-year transitory period, and consequently to inconsistent groupings and aggregations of Federal accounts.

76. Other exclusions are ministries with climate-related projects accounting for less than 15 percent of total projects.



**Table 6.6: Total projects and projects with a CC dimension**

Federal ministries/ divisions	2010/11			2011/12			2012/13			2013/14		
	No. of projects (CGA + PSDP)	No. of CC- related projects (CGA + PSDP)	%	No. of projects (CGA + PSDP)	No. of CC- related projects (CGA + PSDP)	%	No. of projects (CGA + PSDP)	No. of CC- related projects (CGA + PSDP)	%	No. of projects (CGA + PSDP)	No. of CC- related projects (CGA + PSDP)	%
Cabinet Secretariat/ AEC	173	165	95.4%	266	75	28.2%	58	31	53.4%	112	67	59.8%
Communication/ NHA Div.	119	112	94.1%	124	116	93.5%	81	78	96.3%	98	95	96.9%
Defence Div. and SUPARCO	65	32	49.2%	39	23	59.0%	24	16	66.7%	22	12	54.5%
Federal Education and Professional Training	95	80	84.2%	8	5	62.5%	10	7	70.0%	11	2	18.2%
MCC	36	36	100.0%	8	8	100.0%	6	6	100.0%	6	6	100.0%
Finance, Rev, Statistics and Privatization	336	156	46.4%	383	181	47.3%	252	174	69.0%	232	100	43.1%
Interior and Narcotics Control/Ministry of Population Welfare	257	55	21.4%	172	45	26.2%	105	27	25.7%	134	51	38.1%
Kashmir Affairs and Gilgit-Baltistan Div.	15	12	80.0%	20	17	85.0%	14	10	71.4%	11	7	63.6%
Science and Technological Research Div.	108	41	38.0%	56	34	60.7%	66	29	43.9%	55	38	69.1%
Water and Power Div. (Water and Power Sector)	162	105	64.8%	153	92	60.1%	185	84	45.4%	134	107	79.9%
Railways Div.	29	24	82.8%	29	19	65.5%	37	21	56.8%	35	26	74.3%
Housing and Work Div.	105	92	87.6%	49	14	28.6%	56	22	39.3%	74	18	24.3%
HEC	1	1	100.0%	1	1	100.0%	1	1	100.0%	1	1	100.0%

The main observations from Table 6.6 are:

- i) There is no clear stable trend (increasing or decreasing) in the percentage of projects with a climate dimension during the four years under review.
- ii) The percentage of climate-relevant projects across various ministries and across the four years also vary considerably, ranging from a high of 97 percent in the Ministry of Communications (2013/14) to a low of 18 percent in the Ministry of Federal Education (2013/14).<sup>77, 78</sup>
- iii) During 2010–2013, the percentage of climate-relevant projects in total projects in the Cabinet Secretariat, Ministry of Federal Education and Ministry of Economic Affairs, show greater variability than the remaining ministries.

The overall variability in projects that have climate relevance across ministries and across the four years can be traced to:

- i) The 'administrative transition' faced by the Federal and Provincial Government and the latter's various ministries/divisions. This transition continues today;
- ii) The large variation of investment reflected in the development budgets of various ministries and divisions;
- iii) The changing priorities of the Government in power;
- iv) The fluctuations in actual and committed fiscal resources (domestic and specifically foreign) available to the Government in any given year;
- v) The substantial throw-forward of projects already in the pipeline.

77. Excluding the 100 percent relevance attributed to projects of the Ministry of Environment/Climate Change.

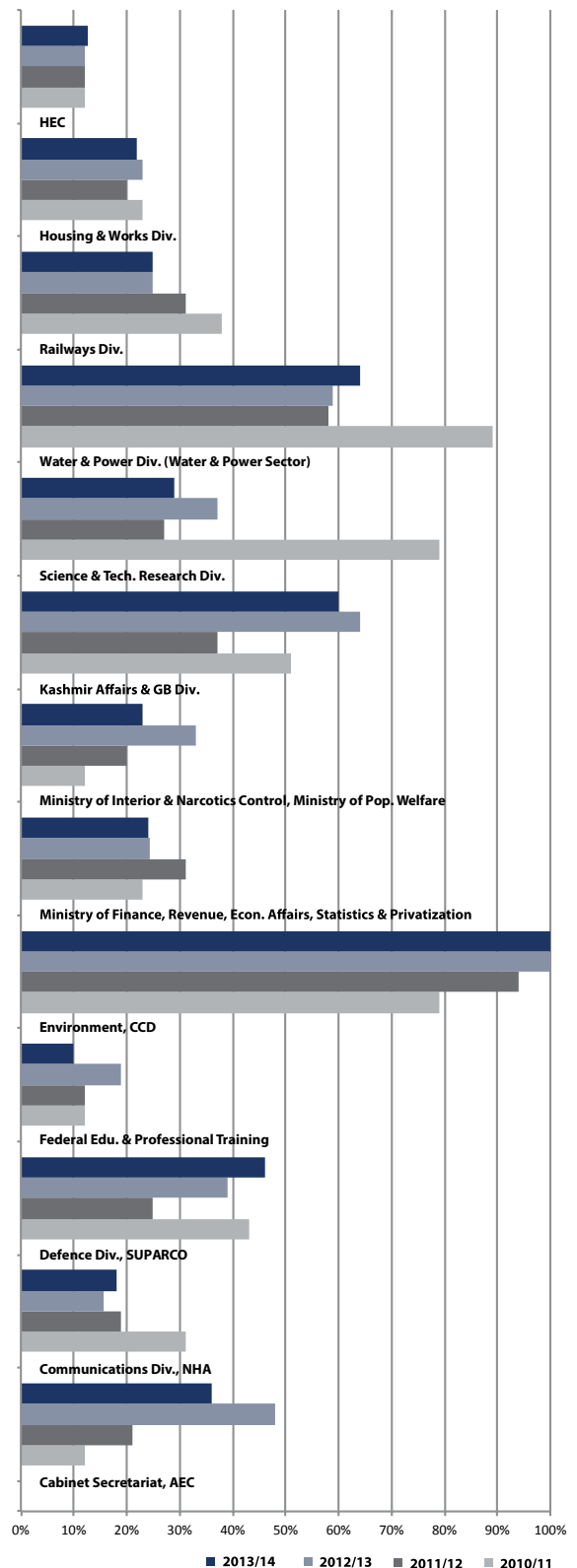
78. The Higher Education Commission (HEC), a self-accounting identity, did not share project-wise actual expenditure data with us. All projects under it were assumed to possess a climate dimension.

Figure 6.1 gives the average climate relevance of selected ministries. The average is the sum of climate relevance weights assigned to the investments of each climate-relevant project divided by the number of projects/programmes in each ministry. The assignment of weight to each project/programme is in accordance with the methodology discussed in Chapter 5. The average relevance weight for the ministry is sensitive to the total number of projects with climate dimensions, as well as to the type of projects (that determine the weight assigned to each project) in the individual ministry. As a summary measure, it also profiles the ministries that undertake projects with strong, significant and weak climate dimensions. It also examines how that strength has varied over the four-year period (Appendix 6.2).

The average relevance weight should be a relatively stable number across time and across ministries in the absence of the 'administrative transition' mentioned earlier. However, the observed fluctuations not only reflect the counterfactual, but also the impact of tight and uncertain fiscal space experienced by the country in this period. Generalizing the four-year trend, the water and power sector exhibits strong relevance, followed by the MCC. The average climate relevance of projects under Science and Technology Research and Kashmir and Gilgit-Baltistan Divisions show variability across the four years and possess strong to moderate relevance. Projects undertaken by the remaining ministries have moderate to weak climate relevance as the ministry-wise averages of climate relevance are usually below 50 percent. In addition, average relevance is one element that contributes to an understanding of year-to-year variations in ministry/division-wise climate-related investments.

Two indicators are used to estimate the climate-related development expenditure of ministries. (Appendices 6.3a and 6.3b). The first indicator is plotted as a bar chart (Figure 6.2a) and shows the percentage share of the climate-related actual development expenditure of each ministry/division in total climate-related actual development expenditure of all ministries (the

**Figure 6.1: Mean climate relevance weight by Federal institution**

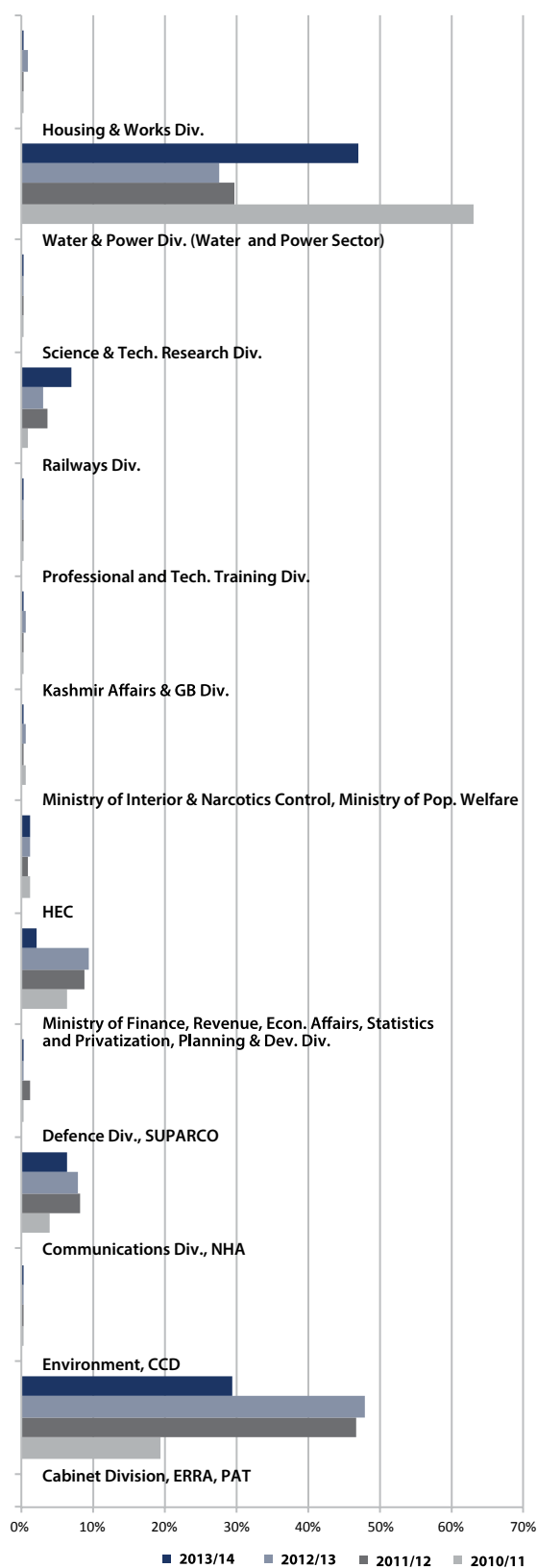


total will not add up to 100 percent, as only a subset of ministries is represented in the figure). The second indicator is the percentage of the climate-related development expenditure of each ministry with respect to each ministry's total PSDP + non-PSDP allocations (Figure 6.2b). This latter percentage is applied to the actual current expenditure of each ministry to obtain an estimate of climate-relevant actual current expenditure.

The highlights of the two indicators are as follows:

- Between 60 and 80 percent of the total climate-related actual investment expenditure during the four years is split between two ministries, namely the MoWP (including WAPDA) and the Cabinet Division (including the AEC).
- The share of each of the three ministries in total climate-related investments (Communications, NHA, Finance and Railways) ranges between 0.8 and 9.4 percent. The corresponding share of the remaining eight ministries is less than 1 percent.
- The aforementioned profile of investment shares in CC activities is consistent across the four years, but varies within each ministry/division.
- The ministry/division-wise profile of climate-related actual investment expenditure as a percentage of each ministry's total PSDP + non-PSDP allocations, show no clear trend in any ministry across four years (Figure 6.2b). In stylistic terms, the ministries (Cabinet Division, Interior and Population Welfare, Professional and Technical Division, Railways, Water and Power and Housing and Works) show higher variability in climate-related investments than other selected ministries. This can once again be traced to variability in the number of projects with a climate dimension, the type of projects and the budgeted amounts allocated to each ministry.<sup>79</sup>

**Figure 6.2a: CC-weighted actual development expenditure as a percentage of total CC-weighted actual expenditure**



79. The climate-relevant investment exceeds the PSDP + non-PSDP budgeted development expenditure for the water and power sector in just one year. This is because the actual expenditure in the Neelum-Jhelum Hydropower project was taken as the difference of two years given in PSDP documents. This exceeded the budgeted expenditure for the same project.

### 6.2.1 Climate change response by the Atomic Energy Commission

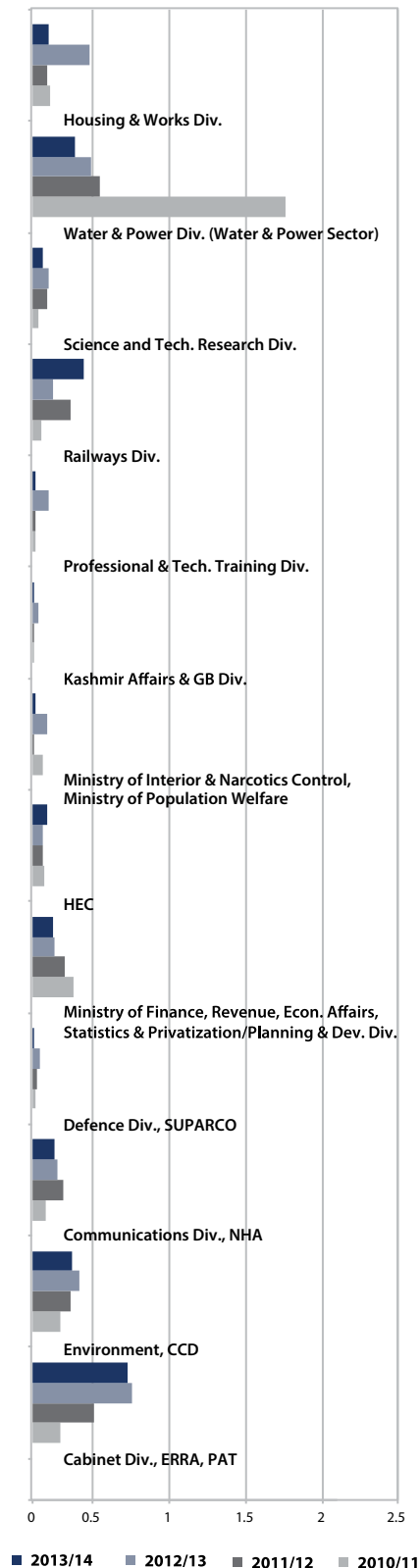
Nuclear energy investments have a potentially important impact on long-run climate change mitigation. In view of this, the AEC’s aggregate investment (development) and current expenditures on projects with climate dimensions in each of the four years at the federal level are profiled in absolute terms and three key ratios in Table 6.7. The three indicators are a) climate-relevant investment expenditure as a ratio of development budget (PSDP plus outside PSDP), b) climate-relevant current expenditure as a ratio of total current expenditure budget, and c) climate-relevant total (development + current) expenditure as a percentage of total federal budget (development + current).

If one considers power supply from nuclear energy an emissions reduction measure or climate mitigation, the indirect/implicit influence of investments being undertaken by the AEC in overall climate-related investments as well as budget, is substantial, though variable in three of four years under study.

### 6.3 CLIMATE-RELEVANT EXPENDITURE IN DEVELOPMENT AND CURRENT BUDGET

As mentioned earlier, the ministry-wise share of PSDP + outside-PSDP development budget spent on climate-related projects and programmes is the main driver for calculating ministry/division-wise climate-related current expenditures. Applying the yearly ratios given in Figure 6.2b to ministry/division-wise yearly total current expenditures from CGA data approximates to federal current expenditures spent on climate-related activities in four years. Table 6.8 shows the aggregate investment (development) and current expenditures on projects with a climate dimension in each of the four years at the federal level. This is profiled in absolute terms and shows three key ratios. These are a) climate-relevant investment expenditure as a ratio of development budget (PSDP plus outside PSDP), b) climate-relevant current expenditure as a ratio of total current expenditure budget, and c) climate-relevant total (development + current) expenditure as a

Figure 6.2b: CC-weighted actual development expenditure as a percentage of total development expenditure



**Table 6.7: The role of the AEC in climate budget metrics, 2010/11–2013/14 (percentage)**

	2010/11	2011/12	2012/13	2013/14
Share of CC-weighted actual development expenditure in total CC-weighted actual development expenditure	4.5	26.9	17.3	20.2
Share of CC-weighted actual development expenditure in PSDP + non-PSDP allocations of Cabinet Div. (incl. AEC)	6.2	29.6	39.6	53.3
Share of mitigation in total mitigation budget	5.1	87.6	45.9	37.4

percentage of total federal budget (development + current).

Investments in projects that have CC spinoffs increased from PKR 122 billion to PKR 187 billion at an average annual rate of 8.5 percent as compared to the corresponding increase of 27 percent in the total revised development budget.

The ratio of CC-relevant development expenditures to total development varied from a high of 55.2 percent in 2010/11 to a low of 26.2 percent in 2012/13. The exceptionally high CC actual expenditure in 2010/11 was due to expenditures in the water and power sector. This is supported by evidence from Tables 6.7, 6.6 and 6.5 on average climate relevance of climate-proofed projects in the sector (89 percent), the share of CC expenditure in total CC expenditure of the sector (63 percent) and the percentage of sectoral CC development expenditures in the sectoral PSDP (208 percent).<sup>80</sup> Note that in absolute amounts, CC-relevant capital spending was fairly stable in the range of PKR 129.5 billion–133.5 billion during 2011–2013. Contributing to this high number is the fact (from MoF budgetary documents) that the denominator of the above, namely revised BEs of development

expenditure, were nearly PKR 181 billion less than the corresponding BEs<sup>81</sup>. With the completion of the projects, the share of the CC-relevant allocations stabilized between 26 and 30 percent of the total development budget.

The derived climate-relevant current expenditures fluctuated along a declining trend from PKR 58.6 billion in 2010/11 to PKR 55.9 billion in 2013/14, an average annual fall of 1.2 percent. In contrast, the federal budget for current expenditures increased at an average annual rate of 8.3 percent. Consequently, the ratio of climate-relevant current expenditure to total current budget decreased slowly from 2.55 percent in 2010/11 to 1.75 percent in 2013/14.<sup>82</sup> The ratios and levels of current expenditure reflect the four-year profile of climate-relevant development expenditures.

The aggregate (investment + current) climate-related budget shows an increasing trend with a small fluctuation between PKR 192 billion and PKR 243 billion during the four-year period. As a percentage of total federal budget, the climate-related expenditures are between 5.8 and 7.6 percent.

80. It is not unusual to have a high allocation in certain years. In Bangladesh, the value of programmes with a climate dimension as a percentage of the Annual Development Programme ranged from 58.5 percent to 41.2 percent during the period 2009/10 to 2011/12.

81. The ratio falls to 35.6 percent if the revised development expenditure figure of PKR 374.7 billion shared by the CGA is used as a denominator instead of the revised budget estimates published in MoF documents.

82. Numerically, climate-related current expenditures are fairly small, but constitute 20–30 percent of 8–9 percent of federal current expenditures devoted to running the Civil Government (see Table 6.2). In turn, the small percentage of current expenditures devoted to running the Civil Government are due to the large weight of interest payments, the defence budget and subsidies.



**Table 6.8: Four-year summary analysis of climate expenditure in the development, current and total Federal development budget (PKR millions)**

Development expenditures (PKR millions)	2010/11	2011/12	2012/13	2013/14
CC-weighted actual development expenditure (a)	133,427.98	129,494.76	133,544.91	187,485.67
Revised budgetary development expenditure				
PSDP	196,000.00	303,664.00	388,407.00	425,000.00
Outside PSDP	45,517.00	121,759.00	107,388.00	289,360.00
Total revised budgetary development expenditure (b)	241,517.00	425,423.00	495,795.00	714,360.00
Ratio - (a)/(b)	55.25%	30.44%	26.94%	26.25%
Current expenditure (PKR millions)				
CC-weighted actual current expenditure - c	58,620.28	69,835.31	63,188.51	55,914.82
Revised budgetary current expenditure - d	2,295,921.00	2,631,911.00	2,907,053.00	3,198,585.00
Ratio - c/d	2.55%	2.65%	2.17%	1.75%
Total expenditures (PKR millions)				
CC-weighted development actual expenditure	133,427.98	129,494.76	133,544.91	187,485.67
CC-weighted current actual expenditure	58,620.28	69,835.31	63,188.51	55,914.82
Total CC-weighted actual expenditures - (e)	192,048.26	199,330.07	196,733.42	243,400.49
Revised budgetary development expenditure	241,517.00	425,423.00	495,795.00	714,360.00
Revised budgetary current expenditure	2,295,921.00	2,631,911.00	2,907,053.00	3,198,585.00
Total revised budgetary expenditure - (f)	2,537,438.00	3,057,334.00	3,402,848.00	3,912,945.00
Ratio - (e)/(f)	7.57%	6.52%	5.78%	6.22%

#### 6.4 BUDGET VARIANCE ANALYSIS

A comparison of annual planned or budgeted expenditure at the start of the fiscal year with the actual end-year expenditure serves implicitly to highlight the efficiency, effectiveness and impact of public fiscal management in pursuing long-term policies, priorities and national goals. A three-way comparison is undertaken for 2013/14 in Figure 6.3<sup>83</sup>. The dark bar refers to the percentage deviation of CC-related actual capital expenditures from CC budgeted capital expenditures for each of the selected ministries/divisions. The light bar indicates the percentage deviation of overall (climate- plus non-climate-related) actual investment expenditures from the total development expenditures for the same ministries/divisions. The ratio of CC deviations to overall deviations is depicted as a shaded circle. A ratio value greater than one suggests that deviation in CC-related investments is higher than deviation in overall investments in the respective ministry/division.

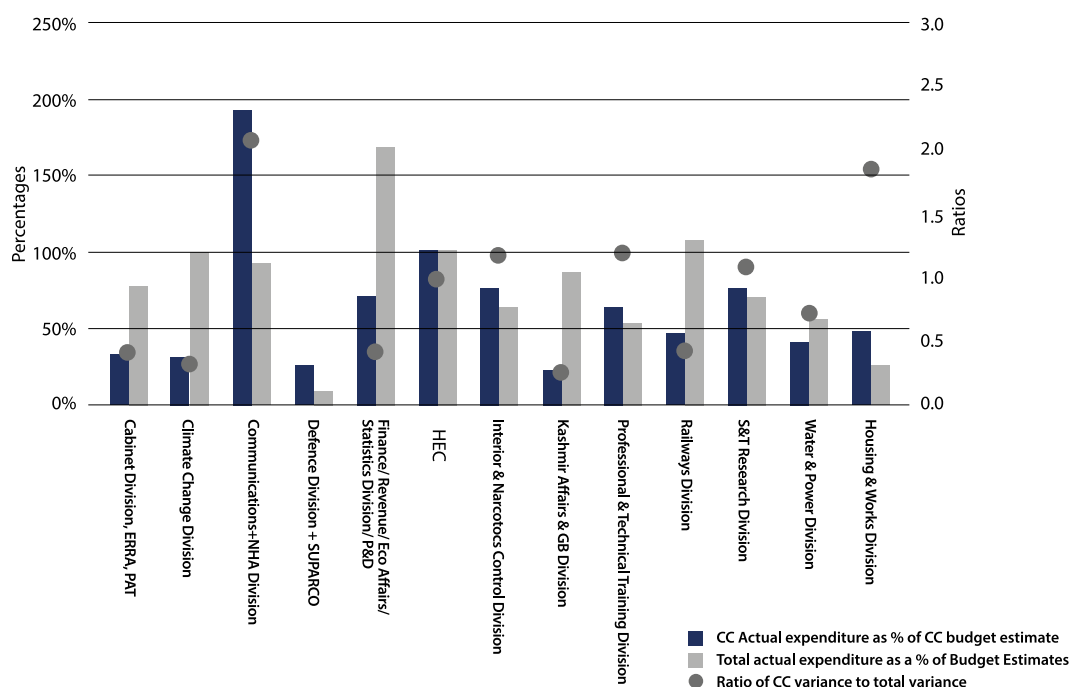
Across the board, climate-related actual investment spending is less than budgeted spending. It is higher than 50 percent for just 6 of the 13 ministries under review. In contrast, at the

overall budget level, the actual spending of 10 of 13 ministries is more than 50 percent of budgeted spending. In other words, it is more stable at the aggregate level. The ratio of the two deviations is a more robust and meaningful indicator; a value greater than one for six ministries/divisions suggests that deviations in climate-proof investments are larger than deviations for all projects combined, for nearly half of the Federal ministries. The six ministries/divisions in question are Communications, defence/Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), Interior and Narcotics Control, Professional and Technical Training Division, Science and Technology Research Division and Housing and Works.

Apart from Communications and Housing and the Works Divisions, the characteristics of the portfolio of projects in the other four ministries/divisions are fairly heterogeneous, and the reason for low allocations and larger deviations could be challenges faced in CC project delivery. In the case of the two aforementioned ministries, short-term Government priorities mostly likely lead to the re-appropriation of funds from more to less CC-related projects.

83. The comparison for the latest year, 2013/14, is likely to yield more stable ratios compared to earlier years as various administrative and legal issues pertaining to devolution, reshuffling and the emergence of renamed ministries and divisions are finalized.

Figure 6.3: Budget variance analysis, 2013/14



## 6.5 CLIMATE EXPENDITURES BY THEME AND TASK

As outlined in Chapter 5, a typology of tasks for CC response activities was developed based on the NCCP. Each of the PSDP development project budget lines with a CC-relevant component were coded to one activity type within the typology. This information, in addition to the proportional expenditure of the budget line on the climate-related component, permitted overall expenditures to each activity type of the typology to be identified. This analysis was carried out for federal development expenditures for 2013/14.

The analysis illustrates that energy represents the dominant climate-related expenditure task in the typology, representing over half the expenditure. Other important task areas are transport (19 percent of PSDP CC expenditure), health and social services (9 percent) and water resources (8 percent) (Figure 6.4).

Following on from the structure of the NCCP, the typology also codes activity-types under

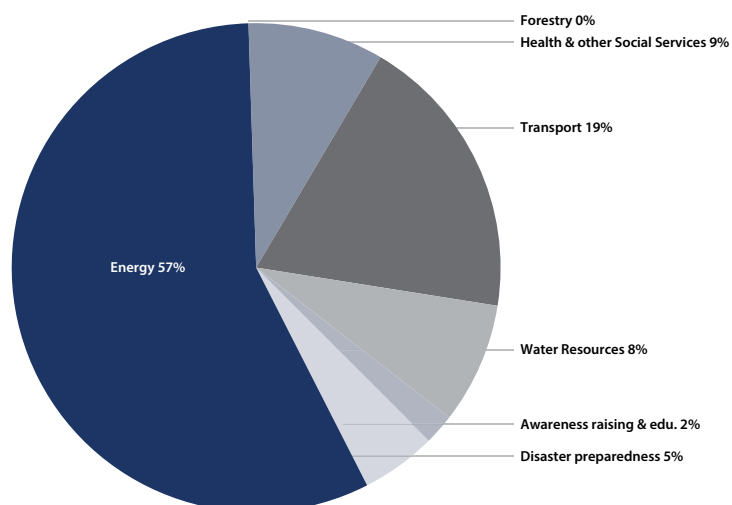
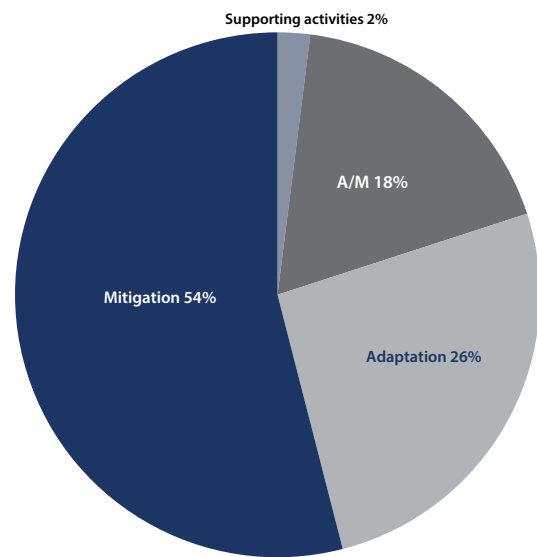


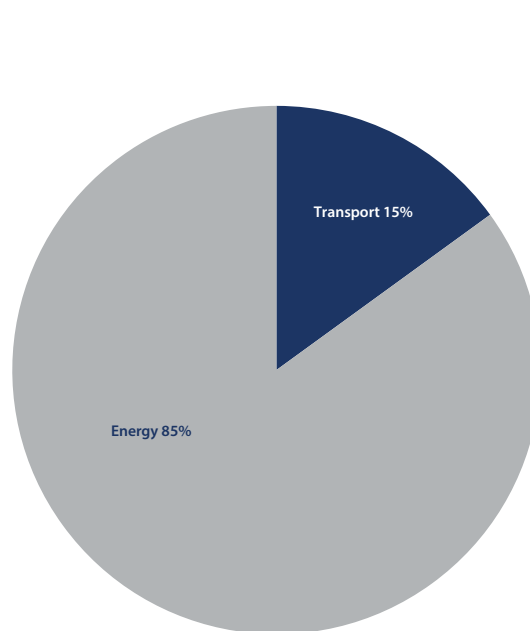
Figure 6.4: Allocation of expenditures to climate-relevant tasks in the PSDP, 2013/14

four themes: mitigation, adaptation, A/M or supporting activities which are CC response enablers. The 2013/14 climate-related federal CC expenditures were related mainly to the mitigation theme, with supporting activities making up just 2 percent (Figure 6.5).

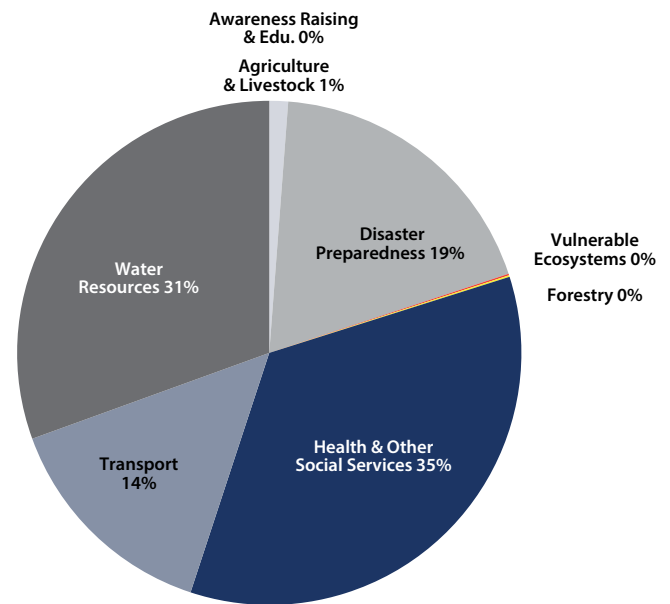
The allocation of expenditures to tasks within each theme demonstrates further detail about climate-related expenditures (Figures 6.6a–6.6d). Within mitigation (54 percent of total federal CC expenditure,) a majority (86 percent) is made up of the energy task area. The remainder is contributed by transport. Energy is thus dominant in the climate budget, making up 60 percent of the total PSDP CC budget in 2013/14. Adaptation has a more varied selection of CC-related tasks, but with three tasks making up over 98 percent of the adaptation expenditure; health and social services, water resources and disaster preparedness. The supporting areas theme represents just 2 percent of the CC budget and is dominated mainly by the awareness raising and education task.



**Figure 6.5: Allocation of expenditures to climate-relevant themes in the PSDP, 2013/ 14**



**Figure 6.6a: Allocation of CC-related PSDP expenditure in the 2013/14 budget to task areas within the four themes of CC response (mitigation theme)**



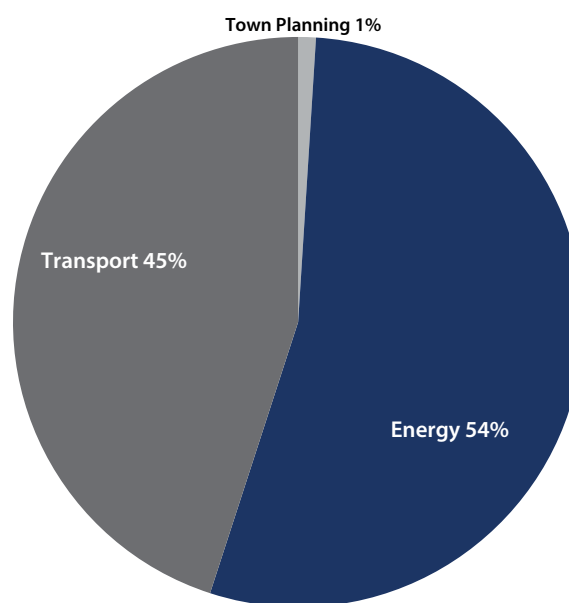
**Figure 6.6b: Allocation of CC-related PSDP expenditure in the 2013/14 budget to task areas within the four themes of CC response (adaptation theme)**

## 6.6 FEDERAL INSTITUTIONAL ASSESSMENT

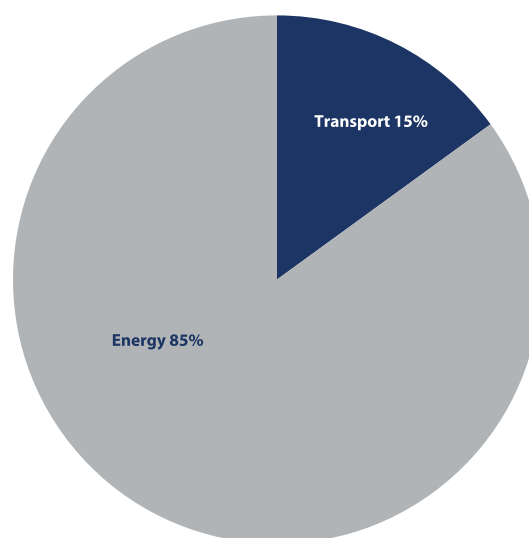
In line with global development partnership trends one of the key recommendations on international (including CC) finance is to gradually increase the use of country systems and be country driven. The Green Climate Fund (GCF) board, in line with the Durban meeting outcome, made a decision that any funding approach that the GCF would adopt would have to be a country-driven process with priorities for funding being in line with country-owned priorities as articulated in national CC and development plans, including NAMAs and NAPs. While this focus on country ownership is a step in the right direction, it also puts the onus on the individual countries to commit to comprehensive multi-stakeholder processes as a critical mechanism that determines national priorities for climate financing. This makes a review of the climate-related budgets discussed previously at the federal level, and the institutional arrangements which surround delivery of those budgets, an important area to review and clarify the present status of the CC response. The remainder of this chapter focuses on the latter area; the federal institutional arrangement related to the CC response.

### 6.6.1 Policy instruments and mechanisms

Policy formulation on CC in Pakistan is primarily under the purview of the MCC with some role being played by the MPDR and MoF in the development and financing of the PSDP, respectively. It is worth remembering that the Planning Ministry is not a decision-making body, but provides recommendations to be taken up by other areas of Government. The allocation of finance for public sector climate actions are ultimately determined by the MoF, as explained in detail in Chapter 4. Although not directly within the scope of analysis,<sup>84</sup> it is important to mention that the Economic Affairs Division and Ministry of Foreign Affairs also have an indirect role to play. This includes coordination on external financing of development projects (including CC) and multilateral agreements that Pakistan is a party to, including the UNFCCC.



**Figure 6.6c: Allocation of CC-related PSDP expenditure in the 2013/14 budget to task areas within the four themes of CC response (supporting areas theme)**



**Figure 6.6d: Allocation of CC-related PSDP expenditure in the 2013/14 budget to task areas within the four themes of CC response (supporting areas theme)**

84. The CPEIR for Pakistan is focused only on public sector allocation and spending.

Pakistan has a well-defined national policy on CC (the NCCP). However, it has yet to trigger substantial climate-related finance. This is due largely to both policy and institutional disconnects. The overall institutional landscape on climate finance in Pakistan is highly fragmented with the Federal Government, provincial governments, private sector and civil society all playing some role. Therefore, even after the NCCP and Framework for Implementation is in place, Pakistan still seems to be finding it difficult to prioritize into actions, and indeed, to convert them into budget prioritization agendas and implementation plans. This is further complicated by the fact that constituency politics in Pakistan over the last three decades have been shaped by service delivery. The current Government has its politics entrenched in large infrastructure projects and responding to the power crisis that the country faces. Heavily invested in IMF agreements, the issue of balance of payments and the tax-to-GDP ratio also remain a concern. These overriding and present-day concerns form a backdrop to the CC institutional arrangements and response planning.

Allocations of the climate budget are dominated by mitigation at the Federal level (Figure 6.5). Examining the climate-related portfolio of investments in the PSDP 2013/14 shows the dominant position of energy, which takes over half of the total climate-related PSDP budget (2013/14; Figure 6.4). When viewed from a CC weight lens, the number of institutional entities with at least one project weighted at 0.75 is 12. This is double the number at the provincial level (Figure 6.7). While three of these are due to AJK, GB and FATA, it still seems to be a highly-distributed investment, especially in the post-18th Amendment scenario where implementation responsibility lies with the provinces rather than the Centre.

The 18th Amendment carried within it a one-year period for the Government to make necessary changes to existing ministries in line with the revised Federal List and subjects devolved to the provinces. CC and disaster management were not the only two subjects to go through iterations of whether they should sit in a ministry, a division or an attached entity; other subjects went through similar discussion. Therefore, the

picture emerging at the federal level depicts to some extent the dispersion due to the transition. However, looking in more detail at the 54 percent proportion of mitigation expenditure of the total CC-related expenditure at the federal level (Figure 6.5), an activity breakdown demonstrates that most mitigation expenditure is related to energy activities (Figure 6.4).

It is quite clear that the strategy at the federal level needs to concentrate on mitigation, especially in terms of investments, and with necessary policy coordination for adaptation, as well. This will require liaison with the Ministry of Communication and the MoWP, which, from consultations, appears to be a willing partner. Further engagement to reflect meaningful changes in policy direction and objectives will be determined by the capacity and proactive role that the MCC takes as a convener and technical advisor.

The GoP's main policy response on CC includes:

- The NCCP, 2012;
- The Framework for the Implementation of the Climate Change Policy;

The GoP's main institutional response on CC includes:

- Establishing the CCD and upgrading it to a ministry.

The GoP's main coordination response not specific to, but affecting CC includes:

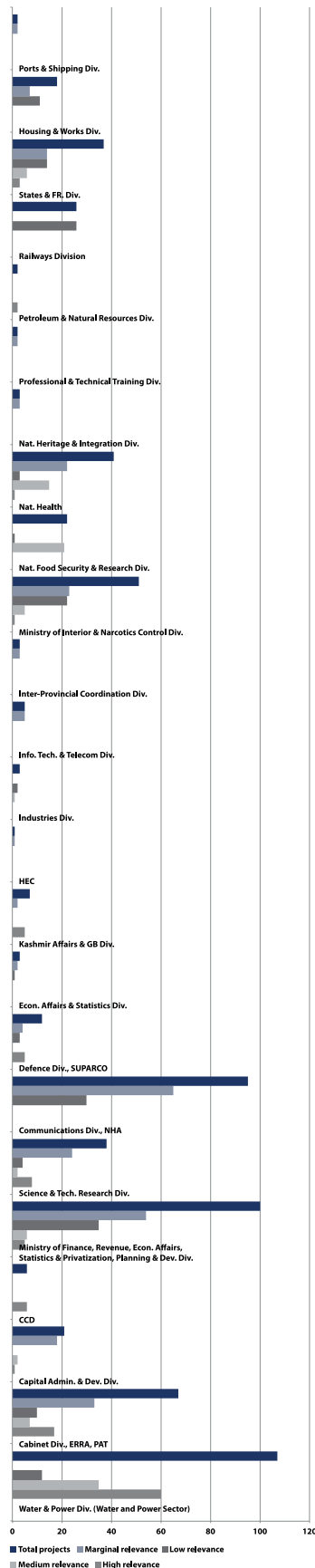
- The inclusion of Climate Change and Food Security as part of the MPDR (position vacant);
- CC was included in Vision 2025, an overarching strategic document integrating the Government's development priorities;
- Instituting a CDM Cell within the Ministry, which is now responsible for NAMAs and NAPs.

The GoP's main process response not specific to, but affecting CC includes:

- The adoption of output-based budgeting under the MTBF;
- Initiating actions to align department-level budgets with the Strategic Partnership Framework and the Integrated Development Strategy;
- Instituting the MTBF Secretariat in the MoF to facilitate the budget preparation process.



**Figure 6.7: Distribution of high-relevance (> 75 percent of climate-related budget) CC investments across federal institutional entities**



There is no formal coordination mechanism around climate finance in Pakistan. However, the assessment of climate-related budgetary allocations and expenditures brings out a clearer sense of opportunities and priorities that a set of stakeholders must coordinate on.

There is a need for coherent strategies on adaptation and mitigation in Pakistan. It must be able to interface ongoing efforts and puts the country on a path that is low-carbon, climate resilient and gender sensitive. In addition, it must influence various bilateral and multilateral initiatives on CC to truly contribute to these overall objectives.

### 6.6.2 Implementing climate change: Policy, planning and institutions

Initiatives like the MTBF are important for the integration of planning and budgeting. However, planning and budgeting still remain two disparate domains at a functional level, not least because the institutional arrangement remains divided in different agencies. This becomes further fragmented when it comes to crosscutting issues like CC. From a review of domestic arrangements to implement climate actions (which are aimed at realizing national policies and strategies), it is evident that it is a highly complex and fragmented space with multiple institutions, actors and channels.

The institutionalization of climate budgeting integrated with policy and planning in the Government will be a major initiative for climate-relevant development planning. Expenditure review mechanisms, for example, would be expected to institutionalize climate relevance analysis, building a debate around it, and instituting processes for adequate resource allocation to climate-related policy commitments. Another important component would be to institutionalize policy and programme reviews for debating climate actions and outcomes. In this regard, we briefly examine institutional mechanisms involved in the budgeting, planning and implementation of the country's policy priorities.

The role of the legislature in policy-making and budget making is politically curtailed in Pakistan. The Cabinet, not Parliament, approved the NCCP

(Chapter 3). The Executive leads budget making, as well. Budget proposals are drawn up by departments led by the MoF (Chapter 4). These are carried through Parliament with minimal debate and amendments. Parliament then approves the budget more-or-less as it was submitted.

The PAC of the legislature reviews audited accounts at the end of the financial year, but with a considerable time lag. The role and purpose of the PAC is not well understood. The hype of the audit, including media attention, steers the process towards sensationalizing minor or major wrongful behaviour. The more serious deliberations on expenditure analysis and performance, therefore, are relegated to the background and often not even carried out. Thus, the process fails to provide any meaningful contribution to budget making.

The presentation of budget proposals to the legislature in parliamentary systems is usually seen as a test of the Government's strength. The open discussion and debate in Parliament opens the budgetary process to citizens at large. In Pakistan, budget making, in essence, remains a closed process making it tougher to include people's concerns of financial resource allocation. Consultative processes on policy, therefore, have to go in hand-in-hand with opening up the budgetary process. Similarly, improving policy monitoring must be matched by positive legislative oversight over the budget.

It has been argued that public sector reforms are only adopted when they are accepted by the institutions responsible for their implementation. Formal and informal mechanisms authorize these ideas and organizational units have the technical ability to implement the reforms effectively. These three factors intersect to create 'space' for reform. The extent of this space determines the extent of reform that is possible.<sup>85</sup> In Pakistan, it can be argued that at this point, there has been considerable progress in all three areas of acceptance, ability and authority. It is recognized that the acceptance followed the leadership by the MoF that developed a pool of local experts that are currently part of the MTBF Secretariat. This resulted in quality and timely products, which gave credibility to the reform initiative. Though this

is good progress, there is still some way to go in establishing the system as the default mechanism for integrating policy, planning and budgeting.

### 6.6.3 Mainstreaming climate change

There is a growing focus on CC, at least within some parts of Government, now that the MCC and the NCCP exist. Table 6.9 provides a federal-level overview of the main entry points and links to CC mainstreaming.

It was therefore appropriate to explore respondents' opinions of CC as a national priority. At the federal level, it seemed very much an agenda confined to the MCC; CC is not a priority for most.

- The MoWP wants to generate maximum power at the lowest cost. Our team was told that corporate companies are not interested in CC – they are only interested in equity returns. Projects such as hydropower projects are not consciously treated at CC-relevant projects, but as strategies for much-needed power generation and energy security.
- The MoWP realized that its hydropower projects produced clean energy. However, they said that that expenditure goes unaccounted in terms of CC-relevant expenditure. Respondents said that the MoWP had never been approached by the MCC about indirect CC-relevant projects.
- We were referenced to EIAs in our discussions. The MoWP said that EIAs were familiar as assessments done for PC-Is where environmental risks are involved and mitigation actions are stated. These EIAs are often done by foreign consultants.
- Similarly for the Communication Ministry, it was realized that actions were climate-related, but there did not appear to be any conscious accounting for it. Hence, even though actions to mitigate CC are being taken, they are not being quantified as CC-related efforts by the NHA or any other body. Such actions include storm proofing, forestation and wire mesh/retaining walls to protect against land sliding. Given the current mix of climate investments at the federal level, both the MoWP and Communications

85. Matthew Andrews, "How far have public financial management reforms come in Africa?", HKS Faculty Research Working Paper Series, RWP10-018 (Boston, John F. Kennedy School of Government, Harvard University, 2010). Available from [http://dash.harvard.edu/bitstream/handle/1/4448885/Andrews\\_HowFar.pdf](http://dash.harvard.edu/bitstream/handle/1/4448885/Andrews_HowFar.pdf).

emerge as key institutional partners along with the NDMA.

In the case of strengthening climate budgets, it would be beneficial to initiate role clarification discussions between the MoF, the newly-reinstated MCC and the MPDR. In our discussions, it appeared that climate proofing and climate relevance were not seen as a priority. There is a need for the MCC to be recognized as politically relevant and technically sound, so as not to exacerbate the problem and be part of the deliberations with ministries key to climate-proofing investments.

However, it did seem that the MoF and MPDR have had a positive experience with awareness of CDM and NAMAs through the MCC, although this may not serve very well for wider CC coordination or mainstreaming; that will entail having clearly articulated roles for the MoF and MPDR.

The MCC can coordinate on policy harmonization and coordination, and with appropriate capacity enhancement, on technical backstopping. There

is presently a vacuum and further need for dedicated CC streamlining and integration into development strategies; the MCC would be the most institutionally appropriate for this. Earmarked climate budgeting within sectors, budget tracking, establishment and monitoring CC-related KPIs linked with the MTBF would be best served by the MoF.

It is noteworthy that in relation to tracking, federal-level stakeholders said they did not think the MTBF ceilings were observed stringently, which was in line with the MoF explaining it as a rolling ceiling for each year of the three-year period. Yet, it is imperative that the MTBF process be further strengthened. Perhaps climate policy harmonization can be used to strengthen the MTBF while enabling a mainstreaming approach to climate policy. Moreover, budget tracking would also require the involvement of the CGA directly or through the MoF.

Equally, if not more important is a working agreement on post-18th Amendment CC mandates

**Table 6.9: Federal-level overview of main entry points and links to CC mainstreaming**

Sector	Explicit link to environment and CC	Ministry/division	Entry points/explicit links for CC mainstreaming at the institutional level
Energy	Alternative energy development support services <input checked="" type="checkbox"/>	MoWP	Houses Alternate Energy Development Board (AEDB), the custodian for the Renewable Energy Policy, 2006.  Sizable investments in hydro-power projects.
	Promotion of energy and water quality <input checked="" type="checkbox"/>	Ministry of Science and Technology	Houses the Pakistan Council of Renewable Energy Technologies (PCRET).
Transport	<input checked="" type="checkbox"/>	Ministry of Communication	One of the two contributors to federal-level mitigation investments.
Water	Water resource management, monitoring and flood mitigation services <input checked="" type="checkbox"/>	MoWP	
	Promotion of energy and water quality <input checked="" type="checkbox"/>	Ministry of Science and Technology	Houses the Pakistan Council of Research and Water Resources (PCRWR).
Disaster Preparedness	To ensure safety and sustainability of human lives during natural disasters. <input checked="" type="checkbox"/>	NDMA (Cabinet Div.)	NDMA is the custodian of the NDRRP.

across the federation and provinces. There are other issues which need to be taken up and negotiated both at the Federal and provincial level (Chapter 7). Who creates incentives for undertaking a difficult reform and who acts on various components of the process? How are the roles between the civil service and the elected legislative organs at the two tiers to be reinvigorated with the objectives of climate action-leading resilience? CC reform will need to remain sensitive to the various responses to these questions as it shapes up for the next steps to realize the objective of using country systems for climate finance.

Among the many challenges for mainstreaming and coordinating CC in Pakistan are the mitigation of, and adaptation to CC requiring actions in many sectors. But CC concerns may or may not be integrated in the decision-making in those sectors. Thus, climate-relevant decisions continue to be taken in different policy areas without much attention to policy coherence.

## 6.7 FINDINGS AND CONCLUSIONS

- During the last four years, the share of federal current expenditures (which includes sizeable interest payments on domestic and foreign debt) in total federal expenditures varied in the range of 79–90 percent, indicating the tight fiscal space available to the Federal Government to spend on development activities.
  - Pakistan remains a resource-constrained (rupee and foreign exchange) economy dependent on foreign flows in the shape of loans, foreign investment, aid or grants. External resources varied dramatically over the last four years. For example, external resources for development varied between 43 and 110 percent of the annual development budget (2010/11–2013/14) suggesting a precarious base for long-term development programmes/thematic funding.
  - The number of climate-relevant development projects and the proportion of climate-relevant projects within each Government institution varied widely across the studies financial years.
- For example, the percentage of climate-relevant projects ranged from 97 percent in the Ministry of Communications (2013/14) to a low of 18 percent in the Ministry of Federal Education (2013/14).
- The highest percentage of climate-relevant projects tended to be in the MCC, the Water and Power Division and the Kashmir Affairs and Gilgit-Baltistan Division.
  - In terms of absolute expenditure, 60–80 percent of the total climate-related actual investment expenditure during the four years is split between two ministries, the MoWP (including WAPDA) and the Cabinet Division (including the AEC).
  - Total federal climate-related expenditure (development + current budget) was estimated to be between 5.8 and 7.6 percent of total federal expenditure in the four studied years.
  - Actual climate expenditure is less than 50 percent of budgeted climate-related expenditure in 7 of 13 ministries under review. This budget variance between budgeted and actual expenditure is lower across the total federal budget, suggesting that climate-related projects tend to have high budget variance.
  - In terms of the typology themes of climate response, a majority of the expenditure is related to mitigation (54 percent). Adaptation is the second largest contributor (26 percent) with smaller contributions from A/M (18 percent) and supporting activities (2 percent) (all for 2013/14).
  - Energy was the dominant climate task in expenditure terms, accounting for 57 percent of the total climate budget. Further significant contributions were from the transport (19 percent, predominantly mitigation), health and social services (9 percent, adaptation), water resources (8 percent, adaptation) and disaster preparedness (5 percent, adaptation).
  - The mitigation response consisted of energy and transport tasks as did 99 percent of expenditure in the joint A/M theme. The

- adaptation response was formed from a wider range of tasks: health and social services (35 percent adaptation expenditure), water resources (30 percent), disaster preparedness (19 percent) and transport (14 percent).
- The NCCP and Framework for Implementation are in place, but challenges remain in prioritizing actions and converting them into budget-prioritization agendas and implementation plans. Indeed, highly-relevant CC projects are more scattered across Federal Government institutions compared to KP.
  - Planning and budgeting still remain two disparate domains because the institutional arrangement remains divided in different agencies. This weak linkage becomes further fragmented when it comes to crosscutting issues like CC.
  - Mainstreaming CC is somewhat limited and may well remain so until there is a clearer working agreement on post-18th Amendment mandates across the MCC, MoF and MPDR. The same applies to the provinces.





07



# KHYBER PAKHTUNKHWA: CLIMATE CHANGE BUDGET AND INSTITUTIONAL ASSESSMENT

## 7.1 PROVINCIAL BUDGET OVERVIEW

KP is one of the four provinces in Pakistan that obtains a major portion of its resources from the divisible pool of Federal revenues under the paradigm of fiscal federalism followed in Pakistan. A brief overview of provincial finances for the last four years is presented, followed by a more detailed CC budget and analysis of allocations to A/M and CC-related tasks.

The KP budgetary profile is based on the KP Finance Department's publication, the 'Annual Budget Statement' for four years and is detailed in Table 7.1. Focusing on revised total budgetary

expenditures (development and current), the size of the budget increased from PKR 214.8 billion to PKR 341.8 billion at an average annual growth of 11.6 percent.<sup>86</sup> Expenditures witnessed a substantial jump of 35.1 percent in the first year of the 18th Amendment that tapered off in the remaining three years to a range of 14–21 percent. This growth in nominal expenditures is marginally higher than the national inflation rate of 10.8 percent recorded during the same period. Comparing budgeted expenditures with revised expenditures, the latter exceeded the former by PKR 11 billion only in 2011/12, and was lower than the budgeted in two of four years.

**Table 7.1: Macro-view of KP's budgeted and revised expenditures, 2010/11–2013/14**

Year	Budgeted expenditures	% changes in budgeted expenditures	Revised expenditures	% changes in revised expenditures
2010/11	208,274	54.9	214,806	35.1
2011/12	249,151	19.6	260,143	21.1
2012/13	303,000	21.6	297,073	14.2
2013/14	344,000	13.5	341,847	15.1

During the last four years, the share of provincial current expenditures in total provincial expenditures was in the range of 68–70 percent indicating more fiscal space available to the Government of KP relative to the Federal Government to spend on development activities. However, the AAGR of development expenditures or ADP (as it is popularly labelled in the context

of the provinces) is 12.0 percent, moving roughly in tandem with the corresponding rate of current expenditure increase at 11.5 percent during the last four years. Table 7.2 gives a summary breakup in the percentage shares of the revised estimates of federal expenditures under broad expenditure heads.

86. The totals of budget expenditure are not exactly comparable with totals in the annual budget statement as they do not include 'net current capital expenditure (Account-II)', which consists mainly of state trading in food and debt servicing (floating).

**Table 7.2: Share of main expenditure heads in revised provincial budget**

	2010/11	2011/12	2012/13	2013/14
<b>Current expenditure</b>				
General public service	57	59	60	24
Public order and safety affairs	16	15	14	16
Economic affairs	7	6	6	7
Health	3	3	4	9
Education	4	5	5	32
Social protection	5	3	3	4
Loan repayments and servicing costs	7	8	7	6
<b>Current expenditure as percentage of total expenditure</b>	<b>70</b>	<b>68</b>	<b>70</b>	<b>69</b>
<b>ADP as percentage of total expenditure</b>	<b>30</b>	<b>32</b>	<b>30</b>	<b>31</b>

A majority of the current expenditure falls under the label of 'general public service'. This is related mainly to salaries and pensions of the provincial bureaucracy. Historically, it moved in the narrow range of 57–60 percent, except in 2013/14 when the Pakistan Tehreek-e-Insaf (PTI) switched to raising the current expenditure on education.<sup>87</sup> Similarly, the share of current expenditures on health doubled from a range of 3–4 percent during 2010–2012 to 9 percent in 2013/14. Loan repayments and servicing costs between 6 and 8 percent are relatively lower as compared to the corresponding costs incurred by the Federal

Government. Expenditure in other activities remained relatively stable during the four-year period.

### 7.1.1 The financing of the ADP

It is useful to examine provincial budget financing as nearly 30 percent of it is spent on development or investment activities. In a stylistic sense, the Government of KP allocates its entire share of the federal divisible pool to current expenditure and finances investments from provincial revenues it collects internally. The contribution of various heads in Table 7.3 brings this out more clearly.

**Table 7.3: Sources of financing of the ADP**

	2010/11	2011/12	2012/13	2013/14
<b>Percentage of internal resources</b>				
Provincial contribution	96	95	94	96
Federal assistance	4	5	6	4
<b>Percentage of external resources:</b>				
Loans	30	9	20	16
Grants	70	91	80	84
<b>Share of internal resources in total resources</b>	<b>80</b>	<b>84</b>	<b>76</b>	<b>67</b>
<b>Share of external resources in total resources</b>	<b>20</b>	<b>16</b>	<b>24</b>	<b>33</b>

The share of internal resources in ADP financing ranged from 67 to 84 percent during 2011–2014, although it declined from a high of 84 percent in 2011/12 to 67 percent in 2013/14. Correspondingly, the dependence of investment expenditures on external resources doubled from 16 to 33 percent during the last three years, suggesting a trend of increasing dependence on external resources in

the KP budget. Between 2012/13 and 2013/14, the absolute increase in external resources financed 38 percent of the absolute increase in the KP budget; the absolute increase in external grants constituted 88.3 percent of the absolute increase in the size of the ADP. In terms of percentages, the share of provincial contribution (94–96 percent) and federal assistance (4–6 percent) in internal

87. In absolute amounts, the current expenditure under general public service dropped from PKR 85 billion in 2010/11 to PKR 57.5 billion in 2013/14. In contrast, the expenditures in education jumped from PKR 6 billion in 2010/11 to PKR 75 billion in 2013/14. A possible shift of expenditure heads between 'general public service' and 'education' may have taken place, given that the total size of the current budget increased by only PKR 29 billion between 2012/13 and 2013/14.

resources remained stable. This was unlike at the federal level where external loans constitute a considerable portion of external resources. The grants component in external resources in KP is dominant, thereby keeping the servicing costs manageable. The grants component ranged from 70 to 91 percent during 2010–2013, partly reflecting development partners' recognition of the province's role as a frontline state in the 'war on terror', as well as the manmade and natural disasters faced by the province over the last decade.

KP's revenue sources are presented in Table 7.4. Resource transfers from the Federal Government under the NFC Award increased from PKR 147.8 billion in 2010/11 to PKR 235.0 billion in 2013/14. The province's dependence on federal transfers ranged from 74 to 81 percent of its total revenue receipts, increasing slightly in the last two years.

The provincial capacity to generate internal resources increased from PKR 52.9 billion to PKR 59.7 billion during 2011–2014 at an AAGR of 3 percent. The growth in provincial tax revenue was almost flat in four years and the entire growth was from provincial non-tax revenues at an annual average rate of 3.8 percent. The share of provincial

revenues has followed a declining trend since 2011/12. In essence, the poor and uncertain law and order and security environment has taken its toll on the province's economic activity and shrunk the tax base.

The geophysical location of KP near the three mountain ranges make it particularly vulnerable to gradual rising temperatures; this creates the need for fiscal space for an effective climate response. If the Provincial Government's current expenditures continue to move in step with federal transfers, as in the business-as-usual scenario, only a radical departure backed by political will (as demonstrated by shifting resources to education and health in 2013/14) will create fiscal space to boost human capacity and allied infrastructure to face CC in a sustained manner.

If, as in the past, development expenditures continue to be financed out of provinces' internally-generated resources, climate-related investments can only continue to grow at a respectable rate, if the provincial revenue base, specifically the tax revenue component, continues to expand. Resorting to external financing, whether foreign loans or Federal Government loans, runs the risk of creating debt for future generations.

**Table 7.4: Federal transfers and provincial revenues for KP (PKR billions)**

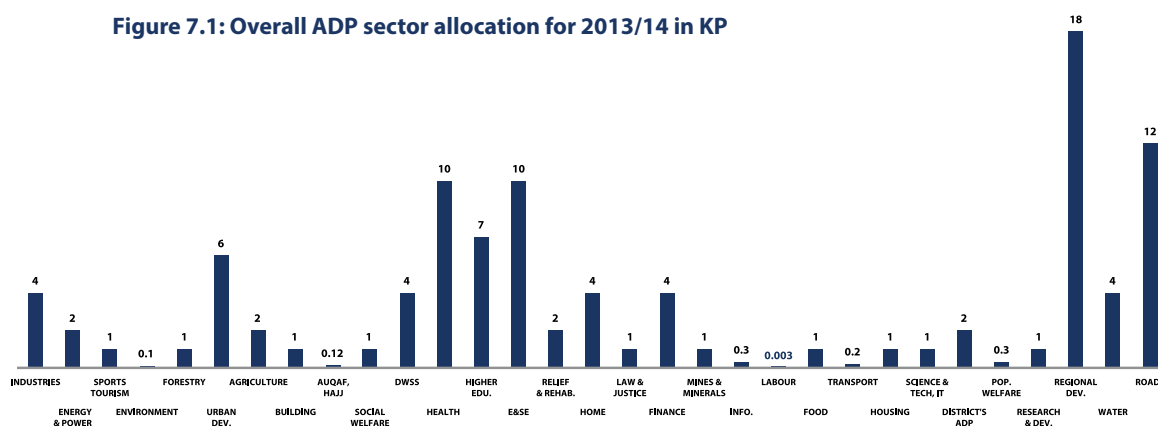
	2010/11	2011/12	2012/13	2013/14
A. Federal transfers	147,803	188,581	199,782	235,047
Tax revenue	134,363	172,621	181,281	207,318
Non-tax revenue	13,440	15,960	18,501	27,729
B. Provincial revenues	52,903	50,395	46,144	59,673
Tax revenue	12,433	12,572	8,165	12,637
Non-tax revenue	40,470	37,823	37,979	47,035
Total revenue receipts	200,705	238,976	245,926	294,721
Percentage of federal transfers				
Tax revenue	91	92	91	88
Non-tax revenue	9	8	9	12
% of provincial revenues				
Tax revenue	24	25	18	21
Non-tax revenue	76	75	82	79
Federal transfers as percentage of total revenue receipts	74	79	81	80
Provincial revenues as a % of total revenue receipts	26	21	19	20

### 7.1.2 ADP sector allocation

The current Government in KP came in with an agenda for reform. Its politics of change needed to be delivered as reform, specifically better management, transparency, local government, education and health. The Government has also

designated high-level champions for CC with the process being steered by experts who have represented Pakistan in international negotiations and contributed to, and produced country assessments and technical knowledge. The ADP covers a diverse range of sectors (Figure 7.1, source: Provincial Budget White Paper, KP, 2013/14).

Figure 7.1: Overall ADP sector allocation for 2013/14 in KP



### 7.2 CLIMATE PROGRAMMES AND BUDGETS

The methodology and steps involved in selecting climate-related programmes and projects in the development budget of KP is similar to the one adopted by the Federal Government. However, unlike the multiple sources of data used for federal analysis, the source for budget and revised

estimates and actual expenditure data is the CGA. At a department level, the classification adopted by the CGA for the ADP and current budget is different from the classification in annual budget statement publications of KP's Finance Department. CC-related expenditures as a percentage of total expenditures for the period under review are shown in Table 7.5.

Table 7.5: KP summary results – CC-related expenditures

PKR millions	2010/11	2011/12	2012/13	2013/14
Total CC-weighted actual expenditures - (a)	13,029.58	18,852.53	15,609.46	24,424.68
Total revised budgetary expenditure - (b)	214,806.00	260,143.00	297,073.00	341,847.00
Ratio - (a)/(b) (as percent)	6.07%	7.25%	5.25%	7.14%

Table 7.6 gives a department-wise summary of percentage of climate-related projects out of total projects financed by the Government of KP in each of the four years.

The main observations from the summary are:

- Overall, the percentage of climate-related projects in total projects ranged from 75.4 to 82.6 percent during the four years. It is much higher compared to the percentage at the Federal level, which ranged from 47.8 to 56.4 percent.
- In many of the 19 departments under review, the percentage of climate-related projects

exceeds 50 percent of total projects and remained consistently high across the four years.

- The following departments consistently show climate-related projects of less than 50 percent of the total; Local Government and Rural Development, Minority Affairs, P&DD, Sports, Culture and Youth Affairs, Zakat Ushr and Social Welfare, Science, Technology and Information and Relief, Rehabilitation and Settlement Department.
- The variability in percentage of climate projects across ministries and years is relatively less than that observed at the federal level.



Table 7.6: Climate-related projects

KPK ministries/ divisions	2010/11			2011/12			2012/13			2013/14		
	No. of projects	No. of CC- related projects	%	No. of projects	No. of CC- related projects	%	No. of projects	No. of CC- related projects	%	No. of projects	No. of CC- related projects	%
Agriculture, Livestock & Cooperation Dept.	253	247	97.6%	232	230	99.1%	141	127	90.1%	132	130	98.5%
Environment and Forest Dept.	59	48	81.4%	53	53	100.0%	55	49	89.1%	45	40	88.9%
Finance Dept.	26	24	92.3%	50	49	98.0%	51	51	100.0%	39	13	33.3%
Food Dept.	1	1	100.0%	9	9	100.0%	9	9	100.0%	9	9	100.0%
Health Dept.	189	180	95.2%	196	195	99.5%	171	167	97.7%	167	161	96.4%
Higher Education Archives and Libraries	74	66	89.2%	140	137	97.9%	99	94	94.9%	92	86	93.5%
Industries, Commerce, Labour, Mineral Dev & Tech. Edu. Dept.	32	26	81.3%	50	31	62.0%	47	26	55.3%	44	28	63.6%
Info & Public Relations Dept.	Nil	Nil	0.0%	14	1	7.1%	Nil	Nil	0.0%	4	2	50.0%
Irrigation & Power Dept.	76	74	97.4%	65	62	95.4%	64	61	95.3%	59	55	93.2%
Local Govt. Elections & Rural Dev. Dept.	81	40	49.4%	105	43	41.0%	77	33	42.9%	76	11	14.5%
Minority Affairs Dept.	8	2	25.0%	20	10	50.0%	18	5	27.8%	Nil	Nil	0.0%
Planning & Dev. Dept.	14	7	50.0%	8	1	12.5%	21	10	47.6%	29	13	44.8%
Population Welfare Dept.	53	29	54.7%	51	48	94.1%	54	53	98.1%	30	29	96.7%
Schools & Literacy Dept.	220	215	97.7%	224	212	94.6%	285	277	97.2%	253	241	95.3%
Sports, Culture & Youth Affairs Dept.	nil	Nil	0.0%	43	1	2.3%	41	1	2.4%	43	1	2.3%
Works & Services Dept.	297	216	72.7%	268	193	72.0%	250	167	66.8%	231	134	58.0%
Zakat, Ushr, Social Welfare & Women Dev. Dept.	38	14	36.8%	47	31	66.0%	49	25	51.0%	52	35	67.3%
Science & Tech. and Info.	8	2	25.0%	7	1	14.3%	9	2	22.2%	9	1	11.1%
Relief, Rehabilitation & Settlement Dept.	1	1	100.0%	Nil	Nil	0.0%	1	1	100.0%	5	5	100.0%
<b>Total</b>	<b>1430</b>	<b>1192</b>	<b>83.4</b>	<b>1582</b>	<b>1307</b>	<b>82.6</b>	<b>1442</b>	<b>1158</b>	<b>80.3</b>	<b>1319</b>	<b>994</b>	<b>75.4</b>

One tentative explanation of the aforementioned trends is that the number of departments and their functions at the KP level remained consistent in spite of the 18th Amendment. Most likely, the functions of the devolved ministries at the federal level were merged into existing provincial departments. In addition, the large number of projects in some ministries (Agriculture, Livestock and Cooperation, Health, Higher Education, Irrigation and Power, Schools and Literacy and

Works and Services) represent similar projects under an identical scheme executed at the district, sub-district (tehsil) and union council level in the province.

Figure 7.2 shows the average climate relevance of each department for the four years. The average is the sum of climate relevance weight assigned to the investment of each climate-relevant project divided by the number of projects/programmes in each ministry. As a summary measure, it also

profiles the ministries that undertake projects with strong, significant and weak climate dimensions, and how that strength has varied over the four-year period. Except for a few departments, the average relevance weight is fairly similar across the period. Mean relevance weight varies relatively more in i) Local Government Elections and Rural Development, ii) P&DD, iii) Sports, Culture and Youth Affairs, and iv) Relief and Rehabilitation Department. Annual fluctuations in mean relevance weight may be caused by the occasional execution of certain projects which significantly affect the mean relevance for that institution.

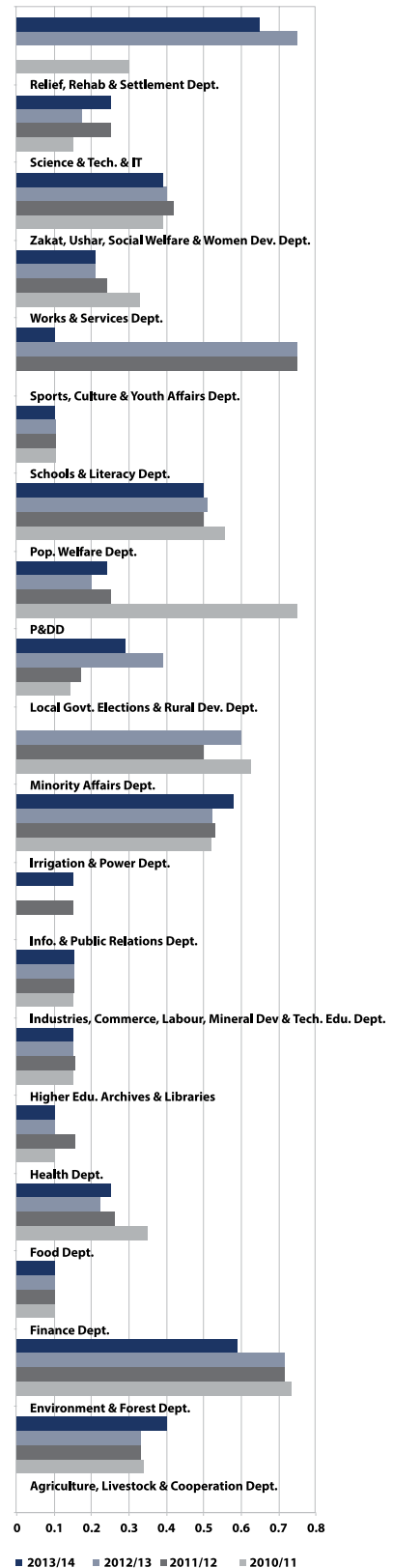
Projects in the Environment and Forestry Department, Irrigation and Power, Minority Affairs, Population Welfare and Relief and Rehabilitation Department, score highly in climate relevance. The investments by Agriculture, Food, P&DD, Works and Services, Zakat and Ushr and Science and Technology Departments are considered to be of medium relevance. The projects in the remaining eight departments have low climate relevance.

Figures 7.3 and 7.4 represent the climate-related development expenditures of departments using two indicators. The first is the percentage share of climate-related actual development expenditure of each department in total climate-related actual development expenditure of all departments. The second indicator is the percentage of climate-related development expenditure of each department with respect to each department's total BEs. This latter percentage will be applied to actual current expenditure of each department to obtain an estimate of climate-relevant actual current expenditure.

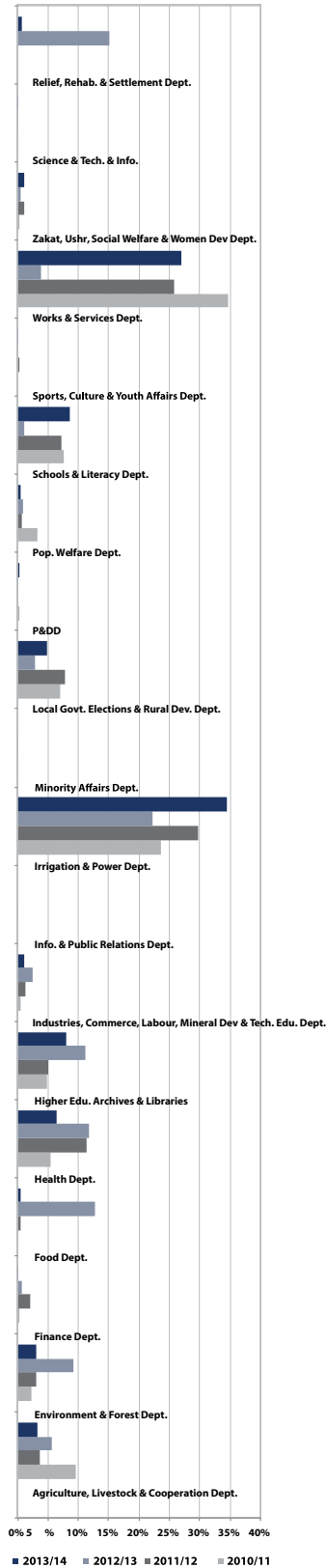
The highlights of the two indicators are:

- In three of four years, 55–60 percent of total climate-related investments are undertaken by two departments, namely Irrigation and Power and the Works and Services Department.
- In 2012/13, 60 percent of total climate-related investments were shared by four departments, namely Food, Health, Irrigation and Power and Relief, Rehabilitation and Settlement.
- Except for 2012/13, the percentage share of individual departments in total climate-related investment was stable for three years.
- In relation to the total budget of individual departments, the share of climate-related expenditure was the highest for the Irrigation and Power

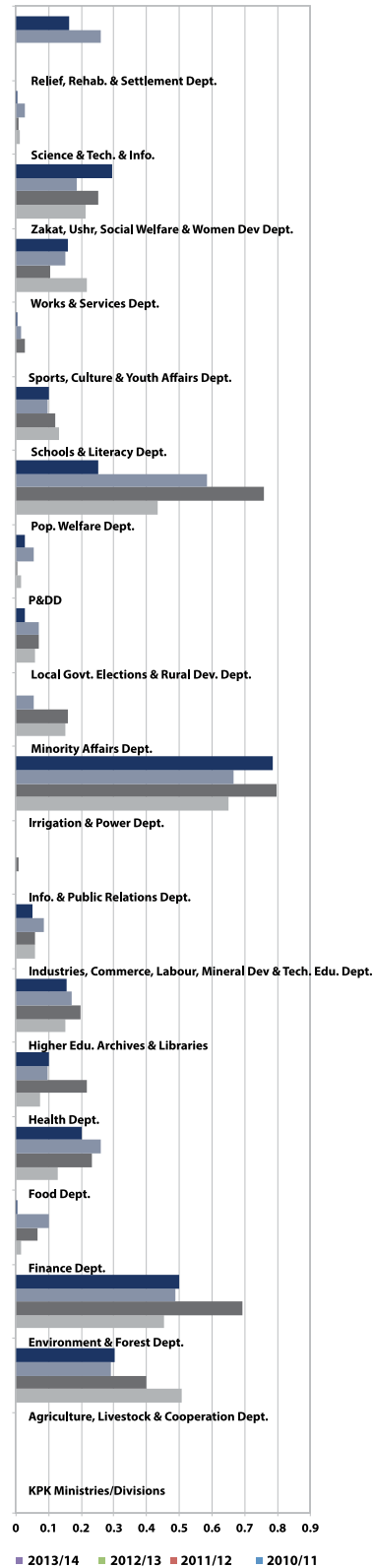
**Figure 7.2: Climate relevance in relation to institution**



**Figure 7.3: CC-weighted actual expenditure as a percentage of total sum CC-weighted actual expenditure**



**Figure 7.4: CC-weighted actual expenditure as a percentage of department's total BEs**



Department and the Population Welfare Department (in three of four years) in the range of 65–80 percent.

- The Agriculture and Environment Departments are the two with the second highest allocations of their budgets to climate-related investments. In the remaining departments, the share of investments to their total budgets varies from 0 to 30 percent.

### 7.3 CLIMATE-RELEVANT EXPENDITURE IN DEVELOPMENT AND CURRENT BUDGET

Based on the aforementioned profile of the number of climate-related projects and their associated investments, a summary trend analysis of climate-relevant expenditure in the current and development budget is presented in Table 7.7. Similar to the analysis of the Federal response to CC, aggregate investment (development) and current expenditures on projects with a climate dimension in each of the four years is profiled in absolute terms as well as in three key ratios. The three indicators are a) climate-relevant investment expenditure as a ratio of development budget (BEs), b) climate-relevant current expenditure as a ratio of total current expenditure budget, and

c) climate-relevant total (development + current) expenditure as a percentage of total provincial budget (development + current).

Investment in projects that have CC spinoffs increased with a fluctuating trend from PKR 8.7 billion in 2010/11 to PKR 10.7 billion in 2013/14 at an average annual rate of 5.2 percent, as compared to the corresponding increase of 12 percent in the total development budget.

The ratio of CC-relevant development expenditures to total development varies from a high of 14.4 percent in 2011/12 to a low of 10.1 percent in 2013/14. Across the four years, this ratio is far more stable for KP as compared to the corresponding ratio for Federal CC investments.

Derived climate-relevant current expenditures increased steadily from PKR 4.2 billion in 2010/11 to PKR 13.7 billion in 2013/14, an average annual increase of 29.3 percent, outstripping the average annual growth of 11.5 percent in the current budget. The ratio of climate-relevant current expenditure to total current budget increased with moderate fluctuations from 2.8 percent in 2010/11 to 5.8 percent in 2013/14. The first three-year ratios and levels of current expenditure reflect the three-year profile of climate-relevant development expenditures.

**Table 7.7: KP - Four-year summary analysis**

	2010/11	2011/12	2012/13	2013/14
Development expenditures (PKR millions)				
CC-weighted actual development expenditure (a)	8,781.43	12,138.40	9,367.34	10,715.78
Revised ADP (ADP) (b)	64,978.00	84,474.00	88,131.00	104,847.00
Ratio - (a)/(b)	0.1351	0.1437	0.1063	0.1022
Current expenditure (PKR millions)				
CC-weighted actual current expenditure - c	4,248.15	6,714.13	6,242.12	13,708.90
Revised budgetary current expenditure - d	149,828.00	175,669.00	208,942.00	237,000.00
Ratio - c/d	0.0284	0.0382	0.0299	0.0578
Total expenditures (PKR millions)				
CC-weighted actual development expenditure	8,781.43	12,138.40	9,367.34	10,715.78
CC-weighted current actual expenditure	4,248.15	6,714.13	6,242.12	13,708.90
Total CC-weighted actual expenditures - (e)	13,029.58	18,852.53	15,609.46	24,424.68
Revised ADP (ADP)	64,978.00	84,474.00	88,131.00	104,847.00
Revised budgetary current expenditure	149,828.00	175,669.00	208,942.00	237,000.00
Total revised budgetary expenditure - (f)	214,806.00	260,143.00	297,073.00	341,847.00
Ratio - (e)/(f) (as percent)	6.07%	7.25%	5.25%	7.14%

The aggregate (investment + current) climate-related budget shows an increasing trend from PKR 13.0 billion in 2010/11 to PKR 24.4 billion in 2013/14, an increase of nearly 87.7 percent over the four-year period. Climate-related expenditures are between 5.25 and 7.25 percent as a percentage of total provincial budget.

#### 7.4 CLIMATE EXPENDITURES BY THEME AND TASK

As outlined in Chapter 5, a typology of themes and tasks for CC response activities was developed based on the NCCP. Each of the ADP development project budget lines with a CC-relevant component were coded to one task type within the typology for 2013/14. This information, in addition to the proportional expenditure of the budget line on the climate-related component, permitted an identification of overall expenditures to each activity type of the typology. This analysis was carried out for KP development expenditures for 2013/14.

The allocation of expenditures to climate tasks was broad for the overall ADP of 2013/14, with transport (28 percent of climate components of the ADP), water (20 percent) and awareness raising and education (18 percent) accounting for about two-thirds of the climate budget. There were smaller allocations to a variety of other climate tasks such as disaster preparedness, energy and agriculture.

The typology also codes the development expenditures under four themes: mitigation, adaptation, A/M or supporting activities which are enablers of the CC response. The 2013/14 climate expenditures by theme were distributed across all four themes (Figure 7.6). Adaptation contributed the most to the climate budget (44 percent) and was followed by A/M (28 percent), suggesting that nearly three-quarters of climate activities in KP had an adaptation component.

The theme with the lowest allocation was mitigation (10 percent), which was contributed mostly by the energy task (Figure 7.5, 7 percent allocation). The low focus on energy and mitigation is apparent in the differences between the Federal and KP theme allocations, as

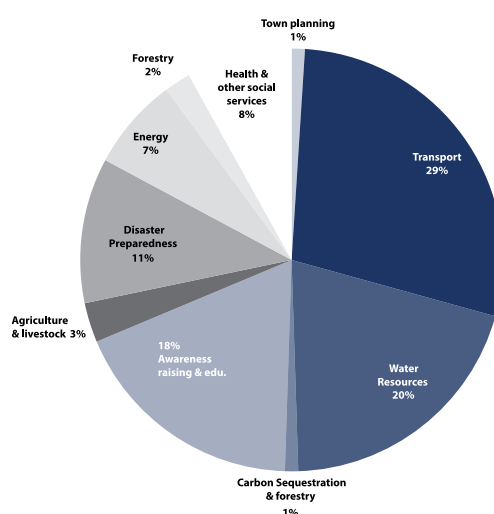


Figure 7.5: Overall 2013/14 ADP climate-related allocations for KP

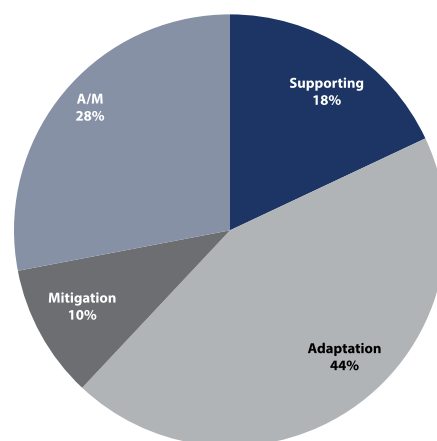


Figure 7.6: Allocation of expenditures to climate-relevant themes in the KP ADP, 2013/14

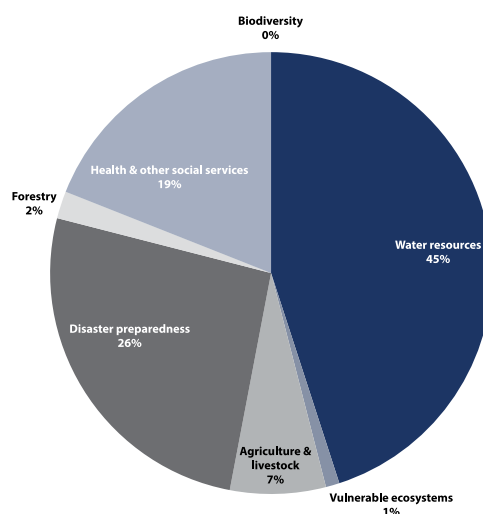


Figure 7.7a: Allocation of CC-related expenditure across the adaptation typology for KP ADP expenditure in the 2013/14 budget



mitigation is the smallest theme with 10 percent in KP. The corresponding figure for the Federal budget was 54 percent.

The analysis permitted a detailed breakdown of tasks associated with each of the four themes outlined above. Adaptation was the largest theme (45 percent) and was formed mainly from tasks in water resources (45 percent), disaster preparedness (26 percent) and health and social services (19 percent). Forestry, vulnerable ecosystems and biodiversity tasks all contributed < 2 percent, each (Figure 7.7a). The smallest theme of mitigation was related to mainly energy tasks, although carbon sequestration and forestry contributed small amounts (Figure 7.7b). Behind adaptation, the A/M theme was the second largest, and in this case, contributed entirely by one task - transport (Figure 7.7c). The supporting theme was predominately linked to awareness raising and education, though with a small contribution from capacity building and institutional strengthening (4 percent).

When viewed from a CC weight lens, just six departments have at least one project weighted at 0.75 or more (Figure 7.8). These were Agriculture, Livestock and Cooperation, the Environment and Forest Department, the Irrigation and Power Department, Local Government and Rural Development, Sports, Culture and Youth Affairs and the Relief, Rehabilitation and Settlement Department).

## 7.5 KP PROVINCIAL INSTITUTIONAL ASSESSMENT

### 7.5.1 Policy instruments and mechanisms

Following the promulgation of the Provincial Environmental Protection Act, 2014 the policy formulation on climate in KP is primarily under the purview of the Climate Change Cell within the EPA, an attached entity of the provincial Environment Department. With the responsibility for developing and financing the ADP for the province, the P&DD and Finance Department, respectively, play an important role, as well.

Under the new Act, the newly-established Climate Change Cell is mandated to interact with all other

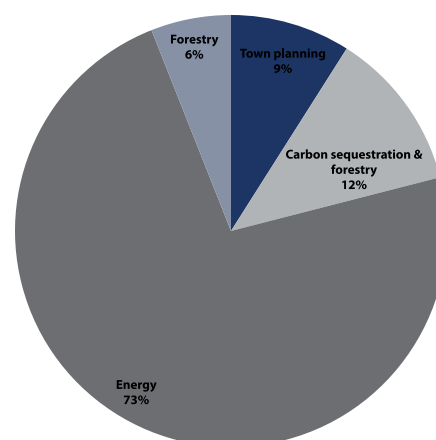


Figure 7.7b: Allocation of CC- related expenditure across the mitigation typology for KP ADP expenditure in the 2013/14 budget

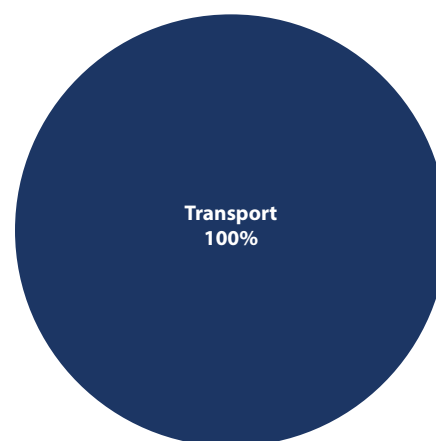


Figure 7.7c: Allocation of CC- related expenditure across the adaptation/mitigation typology for KP ADP expenditure in the 2013/14 budget

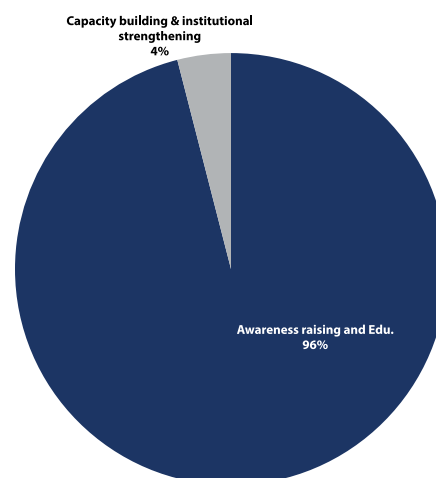


Figure 7.7d: Allocation of CC- related expenditure across the supporting activity typology for KP ADP expenditure in the 2013/14 budget

government agencies and departments to mainstream CC considerations into their respective policies, strategies and actions.

The Government of KP's main policy response on CC includes:

- The promulgation of the Provincial Environmental Protection Act, 2014, which includes CC;
- The initiation of a process for developing a Provincial Climate Change Policy;
- The announcement of the GGI for KP.

The Government of KP's main institutional response on CC includes:

- The incorporation of CC under the purview of the new provincial legislation, PEPA, 2014;
- The instituting of the Climate Change Cell in the provincial EPA.

The Government of KP's main coordination response not specific to, but affecting CC includes:

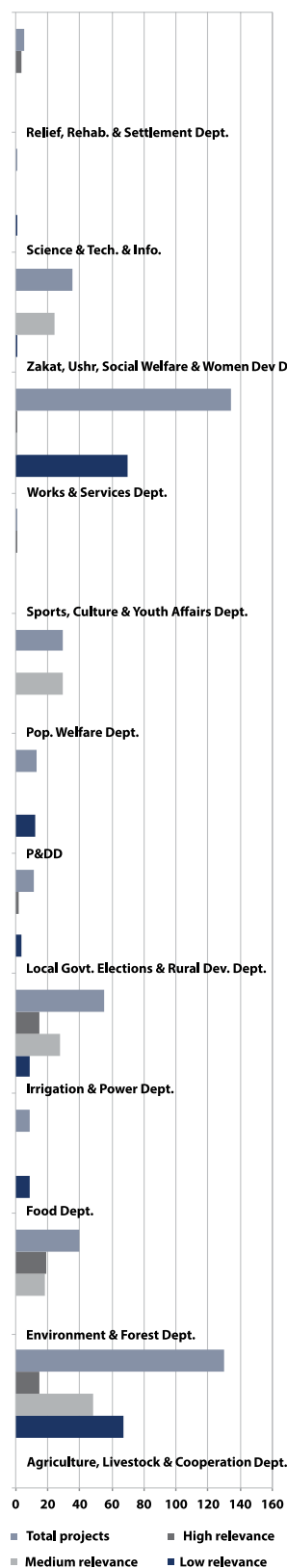
- The integration of a development strategy for KP, an overarching strategic document viewed by the Government as a platform for integrating and coordinating Government priorities;
- The Strategic Partnership Framework for KP, which is designed to align external and internal financing and development partners.

The Government of KP's main process response not specific to, but affecting CC include:

- GGI recommendations for climate adaptation concerns to be integrated into the planning process through the EIA and PC-I preparation stages;
- Adoption of output-based budgeting under the MTBF;
- Initiating actions to align department-level budgets with the Strategic Partnership Framework and the Integrated Development Strategy;
- Instituting the MTBF Cell in the Finance Department as a 'helpdesk' to facilitate the budget preparation process.

There is immense scope for other players within the Government to be involved in the discussion around CC actions and finance, particularly departments that are active in implementing a number of plans and programmes that have immense potential impact on carbon emissions.

**Figure 7.8: The distribution of CC-relevant investment expenditures in relevant Government of KP institutions**



### 7.5.2 Implementing climate change: Policy, planning and institutions

As at the Federal level, the institutionalization of climate budgeting integrated with policy and planning in the Government of KP will be a major initiative for climate-relevant development planning. It is therefore important to understand that the legislative scrutiny for budget and expenditures and all provisions for the Federal level apply mutatis mutandis at the provincial level. It is therefore quite likely that work with the legislatures will be required both at the provincial and the Federal level to help effective oversight of climate policy, actions and financing. Provisions would also be required for the consultative process on policy to go in tandem with the opening up of the budgetary process. Similarly, improving policy monitoring must be matched by positive legislative oversight over the budget.

It is worth remembering that one of the main coalition partners in the Government in power in KP currently bases its reform in accountability and transparency and has recently brought much-lauded legislation. This includes the Right to Information Act, the Right to Services and the Local Government Act. Climate may be chosen as the area to pilot some management practices and processes to demonstrate better access to information, legislative oversight and scrutiny of expenditures and performance.

A review of the CC-relevant budget in KP shows that climate-relevant sectors comprise about 50 percent of the overall ADP for 2013/14. Linking high-grossing CC sectors to institutions and policies reveals the underpinnings of CC expenditures attributed to these institutions, specifically in terms of policy response, as opposed to convenience of inclusion by default.

**Table 7.8: Provincial-level overview of main entry points and links to CC mainstreaming**

Sector	Explicit link to environment and CC in sector policy/output <sup>88</sup>	Provincial department	Entry points/explicit links for institutional level-CC mainstreaming
Transport	Enhanced access to safe, affordable, comfortable and environmental-friendly transport system through improved regulation <input checked="" type="checkbox"/>	Pakhtunkhwa Highway Authority, affiliated with Works and Services Dept.	Laying standards and specifications for various types of roads and bridges for the province.
Water	a) Small dams, storage ponds constructed/rehabilitated b) Strengthening and rehabilitation of flood protection infrastructure c) Improved management of drainage, hill torrent, rain and flood water <input checked="" type="checkbox"/>	Irrigation Department, Government of KP	Explicitly views it work to respond to environmental degradation and global warming (Source: Government of Khyber Pakhtunkhwa Irrigation Department, "History of irrigation", 2013. Available from <a href="http://www.irrigation.gkp.pk/about.php">http://www.irrigation.gkp.pk/about.php</a> ).
Disaster preparedness	Development of a safer and resilient community to through proactive approach towards emergencies and disaster management, community awareness and training <input checked="" type="checkbox"/>	Provincial Disaster Management Authority (PDMA)	Explicit link within the mission of PDMA: To minimize disaster risks within KP through formulation of comprehensive DRM strategies and their effective and efficient implementation.
Energy	Focus on hydropower generation through short, medium- and long-term interventions. Efficient utilization of net hydropower profit. Emphasis on development of viable alternative energy sources. Development of community driven micro-hydropower projects. Energy conservation awareness programme. <input checked="" type="checkbox"/>	Energy and Power Dept.	The department is the custodian of the Provincial Hydropower Policy, primarily an investment incentives policy. However, it can be a viable entry point for the inclusion of CC concerns within incentives for investors, which currently remain implicit.
Agriculture and Livestock	Environmental risk associated with unsustainable means of agriculture. Production minimized <input checked="" type="checkbox"/>	Agriculture and Livestock Department	

88. The base document used is the Integrated Development Strategy. The Provincial Government uses it as a platform to establish links between policy and budgeting.

The aforementioned sectors present the sectors from within the Government's categorization which are part of the CC typology for KP. Climate financing should definitely be used to include climate relevance explicitly in policy priorities. This will help better link planning and budgeting with policy prioritization, thus creating a clearer tracking on budgetary and development implementation investments and interventions. Thus, an opportunity can be created to develop CC as an area to demonstrate how to create this crucial linkage, which is not explicit within the planning and budgeting processes in most, if not all, sectors in public sector development planning and spending (Chapter 6).

A number of other features are relevant from the CPEIR analysis of KP:

- In our discussions with KP Government officials,<sup>89</sup> it was clear that response to CC at the provincial level is a highly complex and contested space with multiple actors, institutions and stakeholders. For example, in many of the 19 departments under review, the percent of climate-related projects exceeds 50 percent of the total projects and remains consistently high across the four years. However, a review of the four-year department-level expenditures shows that the share of investments to their total budgets vary from 0 to 30 percent in up to 15 departments. In such a situation, the task of prioritizing, coordinating and indeed, institutionalizing CC, is cut out for the Climate Change Cell and the Provincial Government.
- As per Figures 7.3 and 7.4 in relation to total budgets of individual departments, the share of climate-related expenditure is the highest for the Irrigation and Power Department and the Population Welfare Department (in three of four years) in the range of 65–80 percent. Irrigation and Power are high-grossing sectors with policy priorities and recognition within stakeholders as climate-relevant. Population Welfare, though not an immediately-recognized area of concentration, must be examined more closely by the Government. It should consider how to link sector policy priorities effectively with CC spending by the department.

- Similarly, the Sports, Culture and Youth Affairs Department was seen to be implementing a project in 2013/14 that was highly climate relevant (more than 0.75 as per the CC methodology). Once again, recognition of CC as a sector will help streamline climate investments within relevant stakeholders, improving both coordination and return on investments that are not diluted across too many actors.
- ADP allocation is generally quite thinly spread out in KP. While CC is viewed as a crosscutting theme in the Integrated Development Plan, 19 departments with CC-relevant projects still constitute a high concentration of departments involved. Moreover, this budgetary allocation is not necessarily matched by policy priorities in all cases. Education, for example, has no policy priority related to CC, yet it comes up as high-grossing sector.

### 7.5.3 Mainstreaming climate change in KP

In the backdrop of the establishment of the MCC, the promulgation of the Climate Change Policy at the national level and the new provincial Act, 2014 and the Climate Change Cell, there is a growing focus on CC, at least within some parts of the Government. It was therefore appropriate to explore respondents' opinions on CC as a national priority. The view at the provincial level was that the focus on CC is only "a priority on paper". The general population is unaware of the issue and considers basic needs, poverty, security issues, and social and economic aspects far more important (Representative, Finance Department, Government of KP).

Moreover, P&DD and Finance Department officials said there were no concerted efforts on CC as it is not a subject of priority or even a consideration. While everyone acknowledged that CC-relevant projects were being implemented, there are no resources for well-thought-out CC-related projects. The reason cited, mostly, was that of competing priorities like addressing the large gap of the number of primary schools for girls. The initiative that was cited by all stakeholders across the board was the planting of trees; a part of the GGI. Within the subset of officials we met, the GGI was not mentioned explicitly, although it was clear that

89. Finance Department, Environment Department and P&DD.

some of the initiatives they mentioned, including the tree plantation scheme, were part of the GGI.

The decision by the Government of KP for planning and investments in any subject, including CC, has to take into account the complex institutional landscape. KP, like other provinces in Pakistan, has a web of departments with 19 currently involved in climate-relevant public expenditures. While prioritizing and allocating climate-relevant funds, it is best to ensure it is deep and narrowly dispersed, as opposed to wide, but shallow allocations.

Mainstreaming is a process rather than a goal. It consists of bringing what can be seen as marginal into the core business and main decision-making processes of an organization (United Nations Educational, Scientific and Cultural Organization [UNESCO] 2003). The development of a provincial CC policy presents an opportunity for mainstreaming CC in KP through a consultative and participatory process with the inclusion of all stakeholders, and a genuine incorporation of their perspectives into the policy. Since a majority of the CC-related actions in KP are adaptation-related, any strategies ensuing from provincial CC policy should ensure that adaptation practices are tailored to variable geography, weather patterns, crops and communities living in particular areas.

The lynchpin for a crosscutting issue like CC, quite often, is coordination, an area KP seems to be performing well in. To streamline CC coordination, the EPA and its newly-assigned coordination role for CC can establish a coordination mechanism for departments involved in highly-relevant CC projects, while keeping a more periodic or need basis coordination with other departments. The Provincial Government is keen to improve management practices within the Government. It hopes to establish a Climate Dashboard to track high relevance and medium relevance CC projects within the ADP.

In the case of climate budgeting, an important role clarification must take place between the Finance Department, the EPA and the P&DD. In our discussions, it appeared that at the provincial level, environment and CC are viewed as the sole prerogative of the Environment Department and its attached institutions. This may serve very well for coordination, but not for mainstreaming,

which will require the Finance Department and P&DD to have clearly articulated roles. The Climate Change Cell can coordinate on policy and technical backstopping while the P&DD can streamline integration into development strategies and monitor related KPIs. The Finance Department can play a core role in earmarked climate budgeting within sectors and budget tracking.

Equally if not more important, is a working agreement on post-18th Amendment mandates across the federation and provincial departments for CC. There are other issues which need to be taken up and negotiated both at the Federal and provincial level. Who creates incentives for undertaking difficult reforms and who acts on various components of the process? How are the roles between the civil service and the elected legislative organs at the two tiers to be reinvigorated with the objectives of climate action? CC reform will need to remain sensitive to the various responses to these questions as it shapes up for the next steps to realize the objective of using country systems for climate finance.

## 7.6 FINDINGS AND CONCLUSIONS

- KP expenditures jumped 35 percent following the 18th Amendment devolution. From 2010 to 2014, the share of development expenditures in the ADP was 30–32 percent with annual growth matching current expenditure. The fiscal space in the development budget was greater than in the Federal budget.
- The dependence of development expenditures on external resources doubled (16 to 33 percent) during the last three years. This suggests a trend of increasing dependence on external resources in the KP budget. External resources are mainly grants (80–91 percent, 2011–2014) helping to keep loan servicing costs relatively low (6–8 percent total budget).
- The ADP covers development projects in a wide range of sectors. Climate-related projects make up 75–82 percent of development expenditure lines (compared to 47–56 percent at the Federal level) with many government bodies having over half of their projects being climate related. This suggests that CC is common and widely



- spread across KP investments.
- The ADP climate expenditure across studied years is relatively stable in terms of average climate relevance of each department and the proportion of climate-related investment per department. In most of the studied years, Irrigation and Power and the Population Welfare Department spent 55–60 percent of their budgets on climate-related investments. Irrigation and Works along with Works and Services have the greatest absolute climate spending.
  - Between 10 and 14 percent of the KP development budget is climate related. However, over the studied years, the climate development investment annual increase was lower than the overall development budget (5 percent compared to 12 percent).
  - Total climate-related spending has increased 88 percent over the last four years (from 2010 to 2014, PKR 13.0 billion to PKR 24.4 billion). Climate-related expenditures represent between 5.3 and 7.3 percent of the total provincial budget.
  - Like the overall ADP, expenditure allocation specific to climate tasks was broad in terms of sectors and government institutions. Transport (28 percent of climate budget of ADP), water (20 percent) and awareness raising and education (18 percent) make up about two-thirds of the climate budget in the ADP.
  - Adaptation is the main KP climate expenditure theme (44 percent of the climate budget), followed by joint A/M (28 percent), supporting activities (18 percent) and mitigation (10 percent). This means that nearly three-quarters of the climate activities in KP had an adaptation component. This compares to the federal level where over half of the climate budget was pure mitigation.
  - Adaptation tasks were varied with major contributions from water resources (45 percent of adaptation budget), disaster preparedness (26 percent) and health and social services (19 percent). Forestry, vulnerable ecosystems and biodiversity tasks all contributed a minor < 2 percent, each.
  - The other themes were quite limited in contributing to task diversity. Mitigation tasks were dominated by energy (75 percent mitigation budget), supporting activities were mainly awareness raising (96 percent of supporting budget) and joint adaptation and mitigation tasks were exclusively transport.
  - The climate policy impetus is provided under the Provincial Environmental Protection Act, 2014 with the institutional remit for climate designated to the Climate Change Cell within the EPA. The Climate Change Cell is mandated with interacting with all other Government agencies and departments to mainstream CC considerations into their respective policies, strategies and actions.
  - The KP Integrated Development Strategy for integrating and coordinating Government priorities and the KP GGI to link climate into the EIA process and PC-I development proposals, both promote increased climate mainstreaming. The overarching policy and integration of climate into planning has the potential to increase the climate sensitivity of the KP ADP.
  - In financial terms, the adoption of output-based budgeting under the MTBF can facilitate climate-sensitive budgeting with support from the P&DD and Finance Department. The potential for climate budgeting is inherently high as about 50 percent of the ADP is related to climate-relevant sectors.
  - The wide dispersion of climate funding, presently across 19 KP government bodies, coupled with competing priorities means that some oversight and coordination is required to drive climate-sensitive budgeting forward. Institutionally, such a nexus exists at the provincial level, as the Climate Change Cell can harmonize climate-related policy and provide technical backstopping. The P&DD can streamline integration into development strategies and monitor the climate-related KPIs of the MTBF. This would be further mandated by increased clarity of post-devolution mandates across the federation, including climate oversight in the provinces and nationally.



08



# AJK, GB AND FATA: CLIMATE CHANGE BUDGET AND INSTITUTIONAL ASSESSMENT

## 8.1 INTRODUCTION

The regions of Azad Jammu and Kashmir (AJK), Gilgit–Baltistan (GB) and FATA comprise the northern and north-western parts of Pakistan. These regions are situated at the foothills of the three mountain ranges, the Himalayas, the Hindu Kush and the Karakorams. The regions will be affected by CC in coming decades as rising temperatures affect weather cycles and the quantity of snow melt, and thereby the water flows originating from the three mountain ranges. The devastating earthquake in 2005 in parts of AJK and KP is also a reminder of unpredictable disasters that the three regions are vulnerable to, and which can consequently alter the geophysical landscape of the region as well as deal a blow to their economies.

In contrast to the fiscal federalism followed in the four provinces, two regions (GB and FATA) are entirely dependent on yearly grants from the Federal Government for development (capital) and current expenditures; they do not have a revenue base of their own.<sup>90</sup> AJK is dependent on grants and loans from the Federal Government for 52–57 percent of its total budgeted expenditures, but finances the remaining expenditure through internal revenues. Annual total fiscal transfers (excluding loans) to the three regions ranged from PKR 58 billion–88 billion during 2011–2014, constituting 1.95–3.20 percent of the federal budget.<sup>91</sup>

The grants for capital outlays in the three regions are outside the Federal PSDP (but part of the overall development budget of the Federal Government) and are channelled as development expenditures of two federal ministries namely the

Ministry of Kashmir Affairs and GB (KANA) and SAFRON. The grants for current expenditure to the three regions are included as ‘current expenditures on revenue accounts’ in the current expenditure of the two involved federal ministries. In addition, the three regions are included in many of the vertical development programmes (PSDP and outside PSDP) of various federal line ministries financed by the Federal Government, as well as multilateral and bilateral donors.

Although these two ministries are part of the federal budget and CC expenditures analyzed in Chapter 6, a region-wise examination of the CC-related investment (development) outlays and current expenditures serves to inform various stakeholders of the emerging response and preparedness of the regional administrations of these highly-vulnerable regions. The analysis of Chapter 6 falls short in this context on two counts: at the federal level, the budgetary accounts of these regions are grouped under the aforementioned ministries; the project details of these ministries in the PSDP are sketchy, aggregate and mostly in block grants as single line items.<sup>92</sup>

## 8.2 GB

The territory of present-day Gilgit–Baltistan (GB) became a separate administrative unit in 1970 under the name “Northern Areas”. It presently consists of nine districts, has a population approaching one million, an area of approximately 73,000 km<sup>2</sup> and shares borders with Pakistan, China, Afghanistan and India. GB was never formally integrated with Pakistan and does not participate in constitutional political affairs. However, it has been administratively controlled by

90. Since assuming a de facto province-like status in 2009, the Government of GB has begun to demand shares in hydropower profits from the Federal Government as is the case with the Government of KP. The demand is due to the fact that power plants on GB rivers are becoming a source of hydropower for other provinces.

91. The account and year-wise details of fiscal transfers appearing in the MoF budgetary documents are given in Appendix 8.2.

92. For example, in 2011/12, PSDP documents listed 20 projects, including a block grant of more than PKR 6 billion to ‘development schemes in GB’ in the Ministry of Kashmir Affairs and GB, while the CGA provided detailed expenditure accounts for over 100 projects for GB for the same year.

Pakistan since the First Kashmir War. The Cabinet passed and the President approved the Gilgit-Baltistan Empowerment and Self-Governance Order, 2009 in August the same year. It granted the people self-rule by creating an elected Legislative Assembly and Council. GB was therefore a de facto province without constitutionally being part of Pakistan. The Government's official position is that Pakistan cannot integrate GB with the rest of the country because it would prejudice its international obligations with regard to the Kashmir dispute.<sup>93,94,95,96,97,98</sup>

Table 8.1 presents the three-year macro trends of total revised and actual expenditures of the government of GB.<sup>99</sup> Nominal total actual budgetary expenditures (development and current) increased from PKR 16.5 billion to PKR 22.6 billion during the three years at an AAGR of 10.4

percent, higher than the average annual inflation rate of 9.2 percent. However, year-to-year changes in both revised and actual expenditures are large, ranging from 38.8 to 1.1 percent.

Table 8.2 profiles the three-year trend in total budget into development (capital) and current expenditures. During the three years, the nominal current expenditures increased at an average annual rate of 11.4 percent against growth of 8.2 percent for development expenditures. The comparatively higher growth in current expenditures is an outcome of the changed administrative and governance structure of the region after 2009. Correspondingly, the share of development expenditure in total outlays decreased marginally from 30.6 percent in 2011/12 to 28.6 percent in 2013/14.

**Table 8.1: Macro-view of GB revised and actual expenditures, 2011/12–2013/14**

Year	Revised expenditures	% change in revised expenditures	Actual expenditures	% change in actual expenditures
2011/12	15,220		16,511	
2012/13	21,131	38.8	22,335	35.3
2013/14	23,765	12.5	23,030	3.1

**Table 8.2: Distribution of development and current actual expenditures (PKR millions, shares as percentages)**

Actual expenditure	2011/12		2012/13		2013/14	
Development	5,047	30.6%	5,687	25.5%	6,449	28.6%
Current	11,464	69.4%	16,648	74.5%	16,125	71.4%

The sectoral distribution of total capital (investment) expenditures is a simple indicator of the administration's priorities and an implicit guide to its sectoral policies. Table 8.3 gives the department-wise share of investment outlays in total development budget for the three years.<sup>100</sup> The investment in infrastructure and water and power ranged from 79 to 89 percent of the total investment in the three years. The trends indicate

that outlay shares have consistently increased in other sectors, namely agriculture, education, rural development and tourism at the cost of declining shares in the Works Department after the 2009 change in administrative and legal structure. This gradual shift in prioritization bodes well for reducing the region's vulnerability to future natural calamities and disasters.

93. M. Ismail Khan, "Gilgit-Baltistan autonomy", Dawn, 9 September 2009. Available from <http://www.dawn.com/news/843990/gilgit-baltistan-autonomy>.

94. Pallavi Singh, "Gilgit-Baltistan: A question of autonomy", The Indian Express, 29 April 2010. Available from <http://archive.indianexpress.com/news/gilgitbaltistan-a-question-of-autonomy/519428/1>.

95. "Gilgit-Baltistan part of Jammu and Kashmir: India", The Times of India, 10 March 2006. Available from <http://timesofindia.indiatimes.com/india/Gilgit-Baltistan-part-of-Jammu-and-Kashmir-India/articleshow/1445666.cms?referral=PM>.

96. Victoria Schofield, *Kashmir in conflict India, Pakistan and the unending war* (London, I.B. Tauris, 2003).

97. Xinhua News Agency, "Pakistani president signs Gilgit-Baltistan autonomy order", 7 September 2009. Available from [http://news.xinhuanet.com/english/2009-09/07/content\\_12011387.htm](http://news.xinhuanet.com/english/2009-09/07/content_12011387.htm).

98. Manzar Shigri, "Pakistan's disputed Northern Areas go to polls", Thomson Reuters, 12 November 2009. Available from <https://web.archive.org/web/20141006195522/http://www.reuters.com/article/2009/11/12/us-pakistan-election-idUSTRESAB1ZE20091112>.

99. GB was granted province-like status in August 2009. Its first budget (for 2011/12) under the new setup was passed in June 2010. Consequently, just three years of data were analyzed.

100. The totals do not add up to 100 percent as some departments are excluded.

**Table 8.3: Share of main expenditure heads in actual development expenditures of GB**

PKR millions	2010/11	2011/12	2012/13
P&DD	1.10%	3.78%	0.64%
Food and Agriculture Dept.	1.58%	1.65%	2.67%
Education Dept.	0.76%	1.90%	3.09%
Health and Population Welfare Dept.	1.65%	0.90%	3.02%
Forest- Wildlife and Environment Dept.	0.05%	1.00%	0.45%
Local Govt. and Rural Dev. and Census Dept.	3.75%	3.95%	4.70%
Tourism, Sports and Culture Dept.	0.48%	2.22%	2.68%
Minerals, Industries, Commerce and Labour	0.30%	0.45%	0.36%
Water and Power Dept.	34.52%	36.86%	37.74%
Works Department	55.81%	47.05%	41.52%

**Table 8.4: GB summary results - CC-related expenditures**

PKR millions	2011/12	2012/13	2013/14
Total cc-weighted actual expenditures - (a)	2597.69	4270.20	4489.71
Total actual expenditure - (b)	16511.25	22334.66	22573.65
Ratio - (a)/(b)	15.7%	19.1%	19.9%

### 8.2.1 GB: Climate Programmes and Budgets

The overall CC-related expenditures in GB as a percentage of total expenditures for the period under consideration are shown in table 8.4. In line with the structure of analysis for Federal and KP data, Table 8.5 presents an overview of the total number of projects in the development budget and a selected number and proportion of CC-relevant projects. We note the following from the trends in the table:

Although GB's development budget varied from PKR 5.04 billion to PKR 6.45 billion during 2012–2014, the number of projects implemented and the corresponding CC-related projects increased exponentially in 2013/14. This may be due to:

- i) More detailed reporting of projects, small or large, in comparison to aggregate reporting in earlier years, including prior to 2009;
- ii) The initiation/implementation of more projects in response to a higher level of grassroots representation in the legislative assembly;
- iii) GB Government policies and priorities. However, the proportion of CC-related projects in the overall portfolio remained in the range of 65–76 percent during the three years.

Except for the Works Department, the share of CC-relevant projects across the three years is less volatile and ranges from 64 to 100 percent

(five departments) and 10 to 33 percent (three departments).

Exponential growth in a number of projects in the Works Department also leads to high variability in the proportion of CC-relevant projects, ranging from 10 to 83 percent.

The relevance weights for each of the projects in every department are summarized as mean relevance ratios for each department in Figure 8.1. The following observations are analytically useful:

- i) The mean relevance of departments is relatively static across the three years analysed in 8 of 12 departments. In other words, there is considerable homogeneity of projects in these departments. They include Food and Agriculture, Education, Health and Population Welfare, Forest and Environment and Water and Power.
- ii) On average, the climate relevance is high for projects implemented by Water and Power, Forest and Environment, P&DD, Services and General Administration and the Home and Prison Departments.
- iii) The mean relevance of CC-embedded investment projects undertaken by the Works Department declined notably after 2011/12, soon after the floods of 2010.



Figure 8.2a shows each department's share in climate-proofing expenditure in total climate-proofing expenditure of the region. Some 70–95 percent of the total climate-proofing expenditures are undertaken by the Water and Power Department in the three years. The next in importance in 2013/14 is the Works Department. All of the other departments' climate-proofing expenditures have remained in single digits and below 5 percent of the total during the three years.

Figure 8.2b shows the total climate-related weighted actual expenditure as percentages of the total budgets of each department. In a stylistic sense, it reflects the importance accorded to climate-proof projects in the overall budgets of the respective departments. The three-year trends are

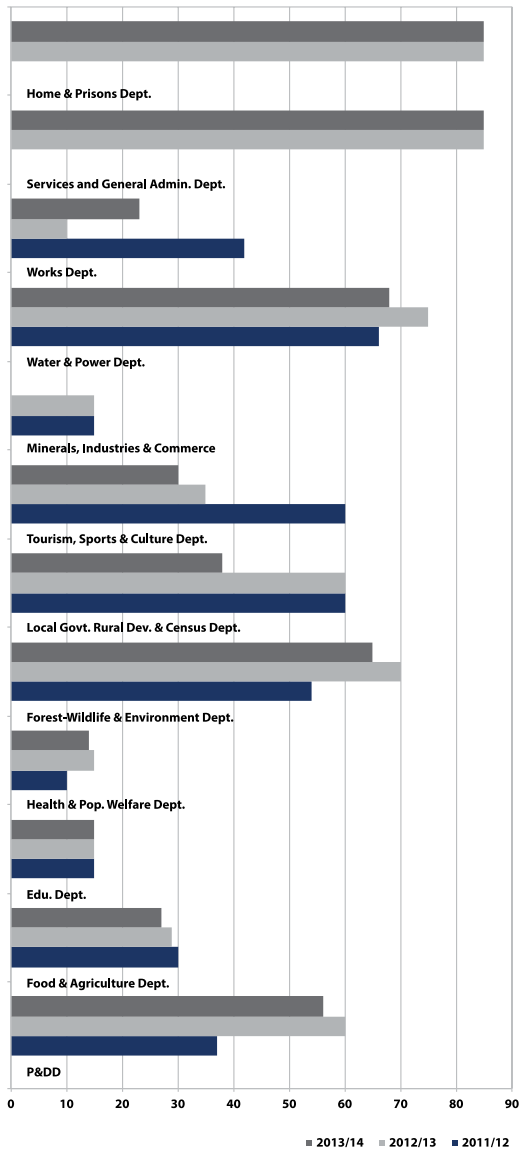
summarized as follows:

- i) There is no increasing or decreasing trend of expenditure shares in the climate proofing of projects during the three years;
- ii) Except for the Water and Power Department and the Food and Agriculture Department, the shares of expenditures spent on climate proofing in all the departments fluctuated between 5 and 10 times, during the three-year period.
- iii) Climate-proofing expenditures on investments undertaken by P&DD, Forest, Wildlife and Environment, Food and Agriculture and Water and Power are, on average, higher than in the remaining departments.

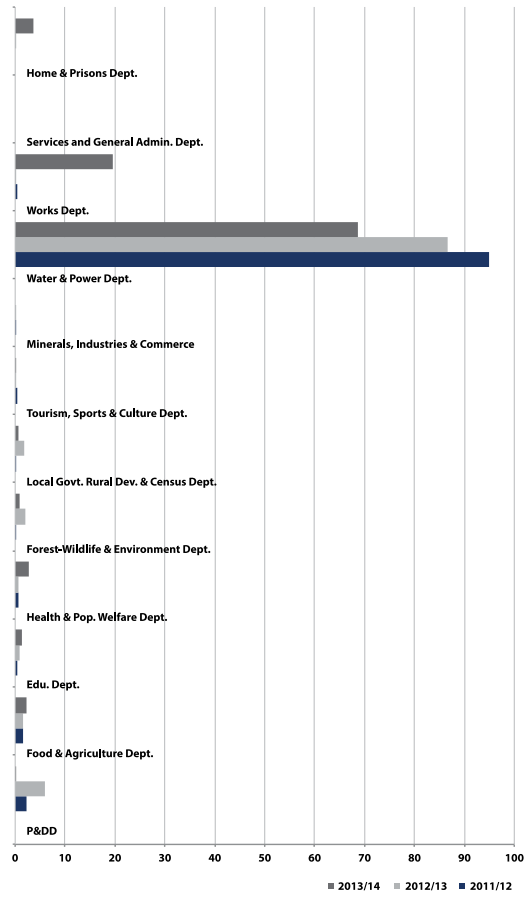
**Table 8.5: Climate-related projects**

GB ministries/ divisions	2010/11			2011/12			2012/13			2013/14		
	Total no. of projects	Total no. of CC- related projects	% (No. of CC-related projects/ Total no. of projects)	Total no. of projects	Total no. of CC- related projects	% (No. of CC- related projects/ Total no. of projects)	Total no. of projects	Total no. of CC- related projects	% (No. of CC- related projects/ total no. of projects)	No. of projects	No. of CC- related projects	%
P&DD	4	3	75.0	8	3	37.5	20	6	30.0	132	130	98.5%
Food and Agriculture Dept.	22	22	100.0	26	25	96.2	70	68	97.1	45	40	88.9%
Education Dept.	8	5	62.5	19	17	89.5	64	46	71.9	39	13	33.3%
Health and Population Welfare Dept.	10	10	100.0	16	15	93.8	63	56	88.9	9	9	100.0%
Forest, Wildlife and Environment Dept.	7	7	100.0	10	10	100.0	17	16	94.1	167	161	96.4%
Local Govt. and Rural Dev. and Census Dept.	9	3	33.3	10	3	30.0	23	3	13.0	92	86	93.5%
Tourism, Sports and Culture Dept.	12	4	33.3	14	2	14.3	35	4	11.4	44	28	63.6%
Minerals, Industries, Commerce	9	1	11.1	10	1	10.0				4	2	50.0%
Water and Power Dept.	7	7	100.0	8	8	100.0	142	91	64.1	59	55	93.2%
Works Dept.	14	3	21.4	10	1	10.0	548	455	83.0	76	11	14.5%
Services and General Administration Dept.				4	1	25.0	4	1	25.0	Nil	Nil	0.0%
Home and Prison Dept.				1	1	100.0	4	2	50.0	29	13	44.8%
<b>Total</b>	<b>102</b>	<b>66</b>	<b>64.7</b>	<b>131</b>	<b>85</b>	<b>64.9</b>	<b>982</b>	<b>745</b>	<b>75.9</b>	<b>1319</b>	<b>994</b>	<b>75.4</b>

**Figure 8.1: GB - Percentage of projects with climate relevance**



**Figure 8.2a: CC-weighted actual expenditure as a percentage of total sum of CC-weighted actual expenditures**

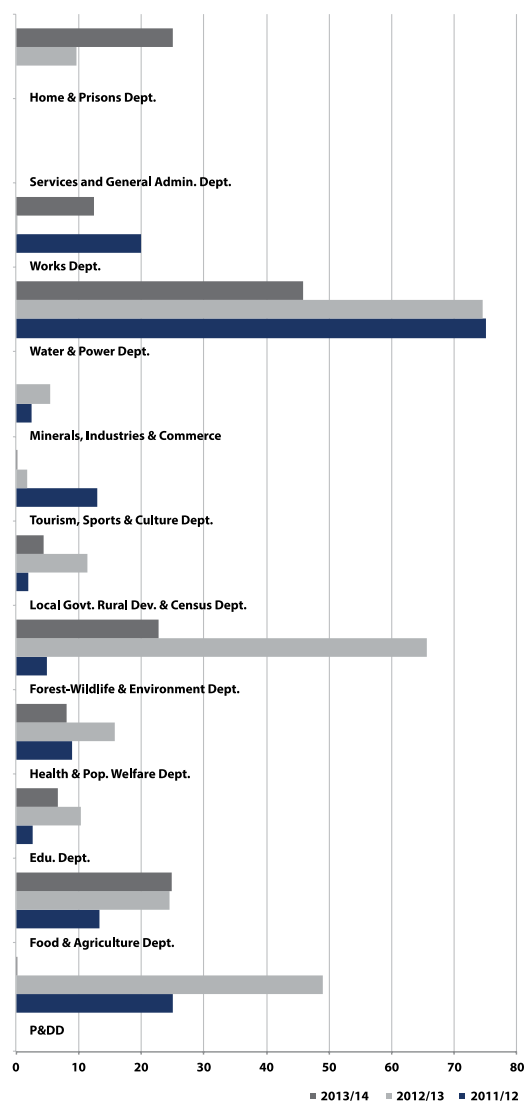


### 8.2.2 GB - Climate-relevant expenditures in the development and current budget

8.6 brings together the trends in earlier tables in the form of three main indicators; climate-related actual investment expenditures as a ratio of total actual development budget, climate-related actual current expenditures as a ratio of total actual current expenditures and total climate-related actual expenditures as a ratio of total actual budgetary expenditures. Climate-proof investment expenditures increased at an average annual rate of 12.2 percent during the three-year period against a corresponding growth rate of 8.2 percent for overall capital spending. As a ratio of total development budgetary outlays, climate-related capital spending is stable and varied little in the three years, ranging from 27.4 to 31.9 percent. This share is comparable to the corresponding federal ratios, but is more than twice similar ratios observed for KP.

The AAGR of climate-related current expenditures is 23.9 percent, almost twice the growth rate in overall current expenditures. The climate-related current expenditure, (a derived measure) as a ratio of the overall current budget increased steadily from 10.6 percent in 2011/12 to 15.5 percent in 2013/14, nearly a 50 percent rise.<sup>101</sup> These ratios are higher than the corresponding ratios estimated for Federal and KP expenditures as line items such as debt servicing and defence are part of the current expenditures of the Federal Government, while debt servicing and state trading in food are part of the current expenditures of the Government of KP.

Figure 8.2b: CC-weighted actual expenditure as a percentage of total budgetary allocation



101. The methodology in deriving climate-relevant current expenditures is the same as that adopted for deriving corresponding estimates for the Federal and KP climate-related current expenditures. See Chapters 6 and 7.

**Table 8.6: GB - Three-year summary analysis**

Development expenditures (PKR millions)	2011/12	2012/13	2013/14
Cc-weighted actual development expenditure (a)	1380.47	1813.98	1993.81
Total actual development expenditure (b)	5047.40	5687.1	6448.77
Ratio - (a)/(b)	27.4%	31.9%	30.9%
Current expenditure (PKR millions)			
Cc-weighted actual current expenditure- c	1217.22	2456.22	2495.90
Total actual current expenditure- d	11463.85	16647.56	16124.88
Ratio- c/d	10.6%	14.8%	15.5%
Total expenditures (PKR millions)			
Cc-weighted actual development expenditure	1380.47	1813.98	1993.81
Cc-weighted actual current expenditure	1217.22	2456.22	2495.90
Total cc-weighted actual expenditures - (e)	2597.69	4270.20	4489.71
total actual development expenditure (ADP)	5047.40	5687.1	6448.77
Total actual current expenditure	11463.85	16647.56	16124.88
Total actual expenditure - (f)	16511.25	22334.66	22573.65
Ratio - (e)/(f)	15.7%	19.1%	19.9%

The higher ratio of climate-related current expenditures also weighs into a higher ratio for overall climate-related expenditures as compared to the corresponding ratios estimated at the Federal and KP level. In the case of GB, the overall ratio ranges from 16 to 20 percent as compared to the range of 5 to 7 percent for KP and the Federal Government.

### 8.3 FATA

The various tribes in the north-west region of Pakistan pledged allegiance to the newly-created state soon after Independence. Some 30 instruments of agreement were subsequently signed, strengthening this arrangement. Mohmand Agency was included in FATA in 1951 and Bajaur and Orakzai in 1973.

The agreements did not include tribal political autonomy. The instruments of agreement, signed in 1948, granted the tribal areas a special administrative status. Except where strategic considerations dictated, the tribal areas were allowed to retain their semi-autonomous status, exercising administrative authority based on tribal codes and traditional institutions. This unique system was enshrined in the Constitution of 1973.

Under the Constitution, FATA is included among the territories of Pakistan (Article 1). It is represented in the National Assembly and Senate,

but remains under the direct executive authority of the President (Articles 51, 59 and 247). Laws framed by the National Assembly do not apply here unless so ordered by the President, who is also empowered to issue regulations for the peace and good of the Government of the Tribal Areas. FATA continues to be governed primarily through the Frontier Crimes Regulations, 1901. It is administered by the Governor of KP in his capacity as an agent to the President of Pakistan under the overall supervision of SAFRON in Islamabad.

Until 2002, decisions related to development planning in the tribal areas were taken by the FATA section of the KP P&DD and implemented by the Government of KP's line departments. In that year, the FATA Secretariat was set up and headed by a Secretary. Four years later, in 2006, the Civil Secretariat of FATA was established to take over decision-making functions with an Additional Chief Secretary, four secretaries and a number of directors. Project implementation is now carried out by the line departments of the Civil Secretariat of FATA. The KP Governor's Secretariat plays a coordinating role between the Federal Government and provincial governments and the Civil Secretariat of FATA.<sup>102</sup>

Table 8.7 shows the trends in overall budget size of the FATA region for the last four years. Revised BEs and actual budgetary expenditures (development

101. The methodology in deriving climate-relevant current expenditures is the same as that adopted for deriving corresponding estimates for the Federal and KP climate-related current expenditures. See Chapters 6 and 7.

102. The role of political agents is explained in Appendix 8.1.

and current) increased at an AAGR of 10.6 and 11.7 percent, respectively during 2011–2014. The actual expenditures are lower than the revised estimates in each of the years, but the AAGR is higher due to a smaller base of actual expenditures. Moreover, the yearly percentage changes of the two indicators have not moved in step with each other, suggesting a weak link between the budgeting process and its actual disbursement or implementation.

Table 8.8 splits the actual outlays into development (investment) and current expenditures. The share of capital spending in overall spending increased

slowly in the last four years from 41.5 percent of the total in 2010/11 to 47.6 percent in 2013/14. The AAGR of development expenditures is 15.1 percent against 9.0 percent growth of recurrent expenditures. Comparing the size of actual outlays of GB and FATA, it is nearly 70 percent more for FATA than GB. The share of development expenditure is also higher in FATA as compared to the corresponding share for GB. The higher total outlays and allocation to capital spending in FATA are an understandable response to FATA's relatively more underdeveloped status and as a crucial border in the fight against terrorism.

**Table 8.7: Macro-view of FATA's revised and actual expenditures**

Year	Revised expenditures	% changes in revised expenditures	Actual expenditures	% changes in actual expenditures
2010/11	26,096	-	21,523	-
2011/12	28,262	8.3	26,116	21.3
2012/13	33,913	20.0	28,384	8.7
2013/14	39,911	17.7	34,370	21.1

**Table 8.8: Distribution of development and current actual expenditures (expenditures in PKR millions, shares as percentages)**

Actual expenditure	2010/11		2011/12		2012/13		2013/14	
Development	8,936	41.5%	11,519	44.1%	12,285	43.3%	16,353	47.6%
Current	12,587	58.5%	14,567	55.9%	16,099	56.7%	18,016	52.4%

Table 8.9 gives the four-year trend profile of the shares of expenditures of various departments in the overall actual development outlays in the region. The following observations are noteworthy:

- i) The shares allocated to many of the departments show considerable variability across time.
- ii) Post 2010/11, the share of development expenditures allocated to Education increased and the share of the Works Department decreased notably. The post-2010/11 shares also remained stable in the two departments.
- iii) The double-digit 2013/14 allocations for capital spending in Education, the Works Department, Services and Administration and P&DD indicate a stylistic prioritization of the regional administration.
- iv) The slow and continuous decline of shares of the Forest, Wildlife and Environment

Department does not bode well for the FATA administration's climate response.

### 8.3.1 FATA: Climate programmes and budgets

The overall CC-related expenditures in FATA as a percentage of total expenditures for the period under consideration are shown in Table 8.10.

Table 8.11 presents an overview of the total number of projects in the development budget and a selected number and proportion of CC-relevant projects. We note the following from the trends in the table:

- i) Though FATA's development budget increased from PKR 8.9 billion in 2010/11 to PKR 16.3 billion in 2013/14, the total number of projects halved during the period. The size and nature of projects in the investment portfolio combined with lumping together many smaller projects under a single programme (specifically in the



**Table 8.9: Share of expenditure heads in actual development expenditures of FATA (percentage)**

	2010/11	2011/12	2012/13	2013/14
Education	5.0%	22.1%	20.3%	21.1%
Health and Population Welfare	6.2%	8.9%	11.0%	9.7%
Food and Agriculture	1.9%	2.5%	4.9%	4.5%
Forest, Wildlife and Environment	7.5%	6.9%	3.3%	2.9%
Water and Power	6.3%	-	1.4%	3.8%
Local Govt., Rural Dev. and Census Dept.	4.4%	18.4%	10.1%	9.1%
Works Dept.	49.1%	14.7%	18.6%	19.8%
Services and Administration	5.3%	26.3%	30.2%	17.9%
P&DD	14.0%	0.2%	0.3%	10.2%
Tourism and Sports	0.2%	-	-	1.0%
Minerals, Industries and Commerce	0.1%	0.1%	-	0.1%

**Table 8.10: FATA summary results – CC-related expenditures**

PKR millions	2010/11	2011/12	2012/13	2013/14
Total CC-weighted actual expenditures - (a)	2,412.2	3,634.9	3,548.9	3,983.6
Total actual expenditure - (b)	21,523.3	26,116.2	28,384.3	34,369.6
Ratio - (a)/(b)	11.21%	13.92%	12.50%	11.59%

education sector) may have led to the observed fall in the total number of projects.

- ii) In three of four years, the share of climate-proofed projects remained in the range of 60–70 percent. In 2013/14, the share increased to 83 percent, partly because of a higher proportion of climate-related projects in the Services and Administration Department.

Figure 8.3 shows the mean CC relevance of projects undertaken by various departments in the FATA region. Note the following in trend values of average relevance:

- i) The mean relevance weight is fairly similar across the four years in six of nine departments. In other words, the portfolio of climate-related projects is also similar, leading to a similar climate-proofing weight of investment schemes.
- ii) The mean climate relevance weight projects in Forest, Wildlife and Environment and Works declined notably after 2010/11, but stabilized thereafter. The Works Department witnessed a higher investment in climate proofing after 2010/11.
- iii) The climate proofing of projects in the Forest, Wildlife and Environment, Water and Power and

Works Departments is generally higher than in other departments.

Figure 8.4a shows the four-year trend in the shares of climate-related expenditure of each department to total climate-related expenditures of all departments. The two main findings are as follows:

- i) The total share of climate-proofing expenditure of four departments, namely Education, Forest, Wildlife and Environment, the Works Department and the Services and Administration Department ranged from 85 to 90 percent and was consistently in double digits during 2011–2013.
- ii) The shares of these departments were fairly stable for the Education Department and Services and Administration after 2010/11. They rose of for the Works Department and declined for the Forest, Wildlife and Environment Department.

Figure 8.4b shows the estimates of CC-weighted actual expenditures as a percentage of total budget, i.e. the share of climate-proofed actual development expenditure in the total revised development budget of each department. This

ratio was also applied to the current expenditure of each department to obtain an estimate of climate-related current expenditure at the department level. This analysis suggests the following:

- i) The projects/programmes of the Forest, Wildlife and Environment Department are most climate-related in relation to its development budget. The corresponding estimates for the

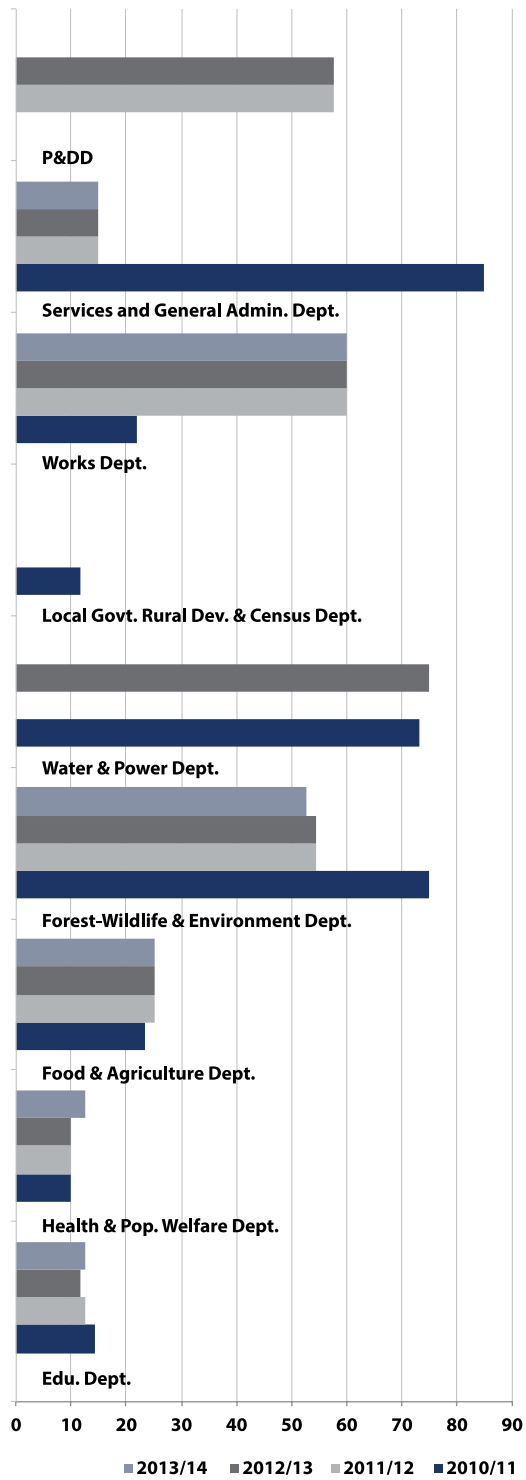
Works Department and Food and Agriculture Department follow closely in second and third place.

- ii) Except for the trends of the Works Department and Services and Administration Department, the extent of climate proofing is stable for other departments in the four years.

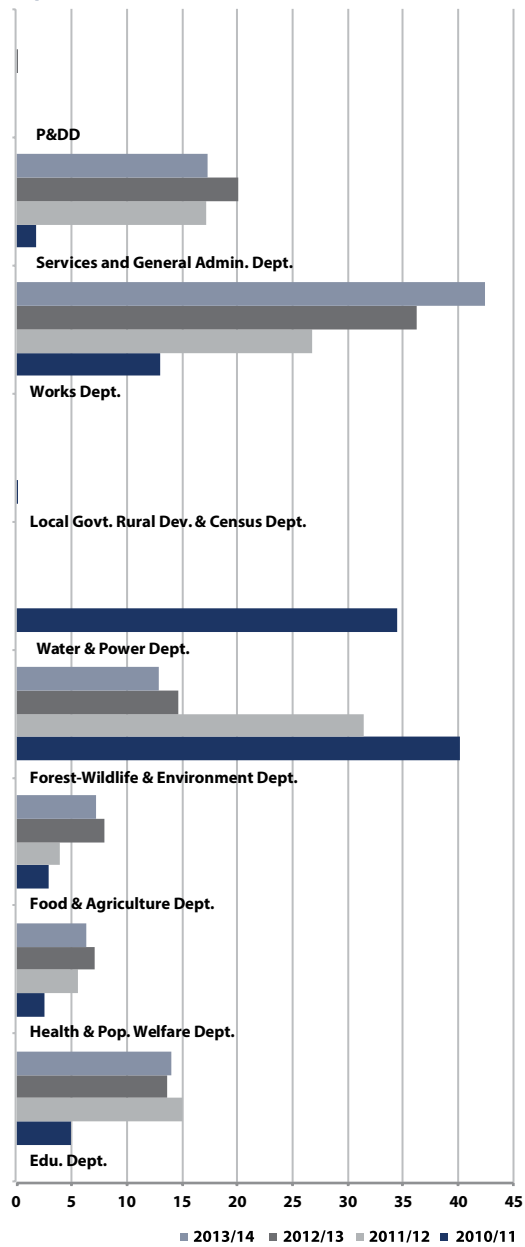
**Table 8.11: FATA climate-related projects**

FATA project categories*	2010/11			2011/12			2012/13			2013/14		
	Total no. of projects	Total no. of CC-related projects	% (no. of CC-related projects /total no. of projects)	Total no. of projects	Total no. of CC-related projects	% (no. of CC-related projects/ total no. of projects)	Total no. of projects	Total no. of CC-related projects	% (no. of CC-related projects/ total no. of projects)	Total no. of projects	Total no. of CC-related projects	% (no. of CC-related projects/ total no. of projects)
Education	118	100	84.7%	33	33	100.0%	26	26	100.0%	27	27	100.0%
Health and Population Welfare	43	36	83.7%	33	32	97.0%	27	28	103.7%	19	19	100.0%
Food and Agriculture	55	44	80.0%	38	38	100.0%	34	34	100.0%	36	36	100.0%
Forest, Wildlife and Environment	12	11	91.7%	22	22	100.0%	22	22	100.0%	28	28	100.0%
Water and Power	9	9	100.0%	-	-	-	9	1	11.1%	-	-	-
Local Govt, Rural Dev. and Census	9	3	33.3%	-	-	-	-	-	-	-	-	-
Works Dept.	33	8	24.2%	42	14	33.3%	41	14	34.1%	42	14	33.3%
Services and Administration	49	4	8.2%	29	14	48.3%	20	14	70.0%	14	14	100.0%
P&DD	-	-	-	14	2	14.3%	19	2	10.5%	-	-	-
<b>Total</b>	<b>328</b>	<b>215</b>	<b>65.5%</b>	<b>145</b>	<b>90</b>	<b>62.1%</b>	<b>172</b>	<b>115</b>	<b>66.9%</b>	<b>166</b>	<b>138</b>	<b>83.1%</b>

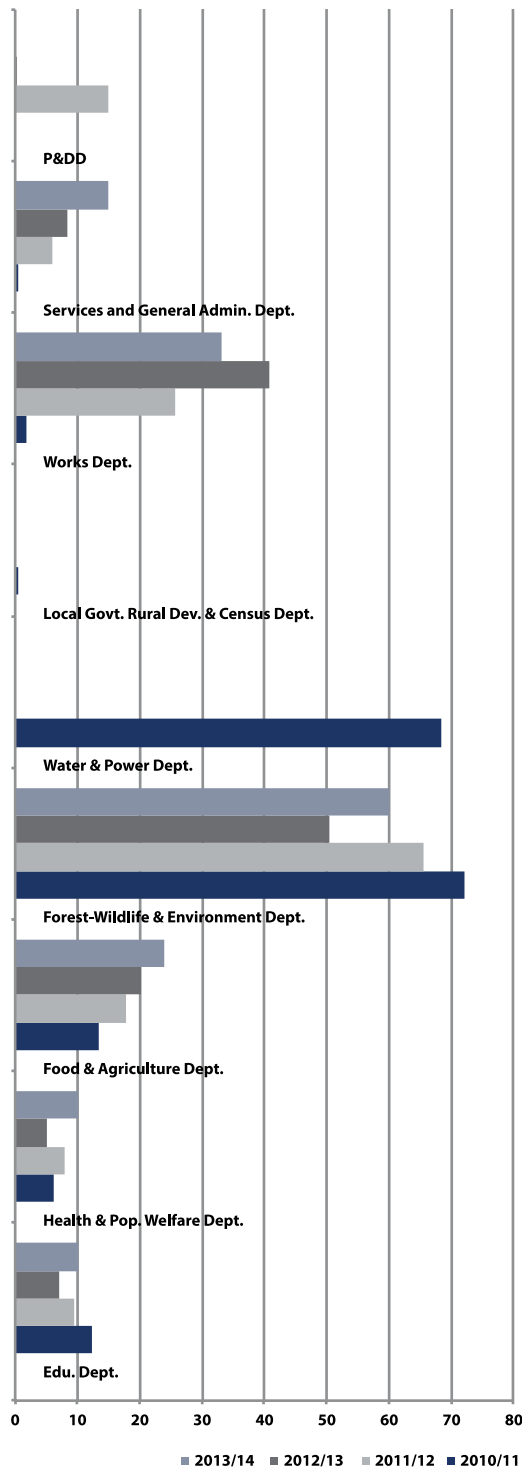
**Figure 8.3: FATA - Percentage of projects with climate relevance**



**Figure 8.4a: FATA - CC-weighted actual expenditures as a percentage of total CC-weighted actual expenditures**



**Figure 8.4b: FATA - CC-weighted actual expenditures as a percentage of total budgetary allocation**



**8.3.2 FATA - Climate-relevant expenditure in development and current budgets**

Bringing together the information on the number of climate-related projects, their climate-relevant weights and total outlays on projects yield climate-proof expenditures in the total development and current budgets of the region. The aggregate expenditure is summarized and represented in Table 8.12 in the form of three ratios, as discussed in the previous section and Chapters 6 and 7.

The AAGR (18.6 percent) of imbedded climate-related actual investment spending increased faster than actual development expenditure growth of 15.1 percent during the period. The ratio of CC-weighted actual development spending to total actual development expenditure varies in a tight range of 13.5–15.5 percent over the year. These ratios for FATA are nearly half of the corresponding ratios estimated for GB.

The AAGR (4.5 percent) of derived climate-related actual current expenditures is half the growth rate of 9 percent of overall growth of current expenditures in the region. This smaller growth indicates indirectly that the spending on portfolio of all projects increased much faster than climate-weighted development expenditures; some scope exists for raising these expenditures on capacity building, human and/or technical. During the four years, the ratio of climate-proof actual current expenditures to total current actual expenditures fluctuated between a low of 8.0 to a high of 13.2 percent. The shares in FATA are one-third lower compared to the corresponding ratios of the GB region.

The third estimate is the ratio of total climate-proof actual expenditures (development and current) to total actual expenditures. It fluctuated between 11.2 and 13.9 percent during the four-year period.

**Table 8.12: FATA - Four-year summary analysis**

Development expenditures (PKR millions)	2010/11	2011/12	2012/13	2013/14
CC-weighted actual development expenditure (a)	1204.8	1712.8	1882.3	2540.9
Total actual development expenditure (b)	8935.8	11519.3	12284.9	16353.1
Ratio - (a)/(b)	13.48%	14.87%	15.32%	15.54%
Current expenditure (PKR millions)				
CC-weighted actual current expenditure - c	1,207.4	1,922.1	1,666.6	1,442.7
Total actual current expenditure - d	12,587.5	14,596.9	16,099.4	18,016.5
Ratio - c/d	9.59%	13.17%	10.35%	8.01%
Total expenditures (PKR millions)				
CC-weighted actual development expenditure	1,204.8	1,712.8	1,882.3	2,540.9
CC-weighted actual current expenditure	1,207.4	1,922.1	1,666.6	1,442.7
Total CC-weighted actual expenditures - (e)	2,412.2	3,634.9	3,548.9	3,983.6
Total actual development expenditure (ADP)	8,935.8	11,519.3	12,284.9	16,353.1
Total actual current expenditure	12,587.5	14,596.9	16,099.4	18,016.5
Total actual expenditure - (f)	21,523.3	26,116.2	28,384.3	34,369.6
Ratio - (e)/(f)	11.21%	13.92%	12.50%	11.59%

## 8.4 AJK

AJK is an autonomous administrative territory of Pakistan. The territory shares a border with GB, together with which it is referred to by the United Nations and other international organizations as 'Pakistan-administered Kashmir'. The territory also borders Pakistan's Punjab province to the south and KP to the west. To the east, Azad Kashmir is separated from the Indian-administered state of Jammu and Kashmir by the Line of Control, the de facto border between India and Pakistan. Azad Kashmir has a total area of 13,297 square km with an estimated population of around 4.6 million.

The territory has a parliamentary form of government with Muzaffarabad as its capital. The President of AJK is the Constitutional Head of the State, while the Prime Minister, supported by a Council of Ministers, is the Chief Executive. The unicameral AJK Legislative Assembly elects both the Prime Minister and President. The state has its own Supreme Court and High Court, while the GoP's Ministry of KANA serves as a link between it and the GoP. Neither Azad Kashmir, nor GB elect members to Pakistan's National Assembly.

Azad Kashmir's financial matters—budget and tax affairs—are dealt with by the AJK Council rather than by Pakistan's Central Board of Revenue. The AJK Council is a supreme body consisting of 11 members, 6 from the Government of AJK and

5 from the GoP. Its Chairman/Chief Executive is the President of Pakistan. Other members of the council are the President and Prime Minister of Azad Kashmir and a few other AJK ministers.

Table 8.13 shows the macro fiscal trends for three years for AJK.<sup>103</sup> The total budgeted outlays in the region increased from PKR 44.5 billion to PKR 55.7 billion during the three-year period at an AAGR of 7.4 percent, which is lower than the annual inflation rate of 9.2 percent. In other words, the real budgeted outlays of the Government of AJK declined during the same period. The year-to-year change remained stable, unlike the corresponding fluctuations observed in GB and FATA.

Over the three years, the shares of current and development expenditures in total outlays remained stable within a narrow range and do not show any trend. In nominal terms, the development expenditures increased at an average annual rate of 7.9 percent and current expenditures increased at an average annual rate of 7.3 percent. Compared to the corresponding growth rates of GB and FATA, these rates were lower.

In spite of the devastating earthquake of 2005 and the resulting reconstruction of social and physical infrastructure that is still in progress, these low allocations understate the amount of direct investments undertaken by the international NGO community and the GoP.

103. The expenditure analysis for AJK is restricted to three years as the CGA did not share data for 2010/11. Moreover, the Government of AJK's website listed budget documents for just two years, i.e., 2011/12 and 2013/14. Consequently, the macro-analysis is based on budgeted figures rather than revised and actual expenditures.



**Table 8.13: Macro-view of AJK's budgeted expenditures**

Year	Total budgeted expenditures	% change in total budgeted expenditures	Development budgeted expenditures		Current budgeted expenditures	
			Outlay	% share	Outlay	% share
2011/12	44,549	-	8,284	18.6	36,265	81.4
2012/13	49,597	11.3	9,547	19.2	40,050	80.8
2013/14	55,685	12.3	10,500	18.8	45,185	81.2

Table 8.14 shows the share of the main departments in overall capital spending of the region.<sup>104</sup> The three-year trends indicate the following:

- i) The Transport and Communications Department absorbed over 40 percent of the ADP. The allocation to the power sector was the second highest.
- ii) The allocation to Education and Health increased during the period. Allocation to Environment/Forestry/Wildlife stagnated while allocations to Local Government and Rural Development and Physical Planning and Housing declined marginally. Allocation to Transport and Communications fluctuated in the range of 40–45 percent.

**Table 8.14: Development expenditure shares of main departments**

	2011/12	2011/12	2012/13
Education	7.7	8.4	9.3
Environment/Forestry/ Fisheries/Wildlife	3.6	3.7	3.5
Health	3.2	2.9	6.1
Local Govt./Rural Development	9.7	8.1	8.1
Power	12.7	11.6	11.8
Physical Planning and Housing	7.4	6.6	6.5
Transport and Communications	40.0	45.0	41.0

#### 8.4.1 Financing of AJK – ADP

Table 8.15 shows the sources for financing the current expenditures of the AJK region. Both nominal tax and non-tax revenue plus receipts increased at an AAGR of 9.4 and 6.9 percent below the annual inflation rate during the period, indicating an erosion of real value of resources collected within the region. However, the AAGR of federal grants (11 percent) kept pace with the inflation rate. In contrast to the fiscal structure followed in KP, where the entire current expenditure is met from Federal transfers and capital spending from internally-generated revenues, the entire ADP in AJK is financed from loans from the Federal Government; slightly more than 40 percent of current expenditures are financed from federal grants.<sup>105</sup>

The development budget needs to be enhanced substantially if the region's future vulnerability to CC is to be addressed in a sustainable manner. The options are to either become more dependent on Federal loans, thereby increasing debt and concomitant debt servicing liabilities, or to gradually reform the tax base to entirely finance the current expenditures from internally-generated funds. The Government of AJK will then be in a position to request grants (instead of loans) from the Federal Government to finance long-term investments to adapt and mitigate the consequences of CC.

#### 8.4.2 AJK: Climate programmes and budgets

The overall CC-related expenditures in AJK as a percentage of total expenditures for the period under consideration are shown in Table 8.16.

104. The totals do not add up to 100 percent as departments with smaller allocations are excluded.

105. Note that total revenue receipts in 2011/12 and 2012/13 match the current expenditures, exactly. The current expenditures in 2013/14 were less as PKR 3,046 million of total revenue receipts were used to pay federal loans.

106. The incomes (in terms of fees and charges) of various departments under the Government of AJK are recorded as non-tax receipts.

**Table 8.15: Distribution of resources for current budgetary expenditures (PKR millions)**

	2011/12	2012/13	2013/14
Tax revenue and receipts	11,156	12,550	14,783
Direct taxes	6,940	7,514	9,329
Indirect taxes	3,496	4,196	4,645
Tax receipts	720	840	809
Non-tax revenue and receipts	25,109	27,500	33,448
Income from property	1,800	775	600
Other non-tax revenue <sup>106</sup>	255	135	203
Federal grants	15,000	16,500	21,000
Other non-tax receipts	8,054	10,090	11,645
Total revenue receipts	36,265	40,050	48,231
Percentage of tax revenues	30.8%	31.3%	30.7%
Percentage of non-tax revenues (excluding federal grants)	27.9%	27.5%	25.8%
Percentage of federal grants	41.4%	41.2%	43.5%

**Table 8.16: AJK summary results - CC-related expenditures**

Total CC-weighted actual expenditures - (a)	4,110	6,959	6,963
Total budgeted expenditure - (b)	44,549	49,597	55,685
Ratio - (a)/(b)	9.2%	14.0%	12.5%

As stated earlier, the extent of the Government's budget devoted to climate proofing is based on the share of projects with climate relevance in the overall portfolio of projects, their importance in terms of relevance weights, and the conversion of weights into cc-related capital spending in terms of nominal rupees. Table 8.17 shows the department-wise trend in climate-related projects as a percentage of total department-wise projects initiated in each of the three years. The share of climate-related projects in the overall portfolio of projects is fairly high (74–81 percent), and for most years, exceeds the corresponding percentages of GB and FATA. Additional characteristics of the trend are as follows:

- i) Over 50 percent of the projects are climate related in 7 of the 14 departments of the Government of AJK. Of these, six are managing more than 80 percent of the projects that have some degree of climate relevance.
- ii) There is considerable stability (or less variation)

in the share of climate-related projects over the period. Apart from Social Welfare and Women's Development, the trend in shares is similar for sectors with below and above 50 percent of projects in their respective portfolios.

Figure 8.5 shows the three-year trend in department-wise mean relevance weight of projects related to CC.

- i) Except for projects undertaken by the Development Authorities and Industries Departments, the mean relevance in three years for all other departments is fairly similar. This suggests that the characteristics and number of portfolios of projects supporting climate response implemented by the Industries and Development Authorities were heterogeneous.

A gradual increase in climate relevance of projects undertaken by the Environment/Forestry/Fisheries/Wildlife, Local Government and Rural Development and Social Welfare Departments is encouraging.

Table 8.17: AJK climate-related projects

Sectors	2011/12			2012/13			2013/14		
	Total no. of projects	Total no. of cc-related projects	% (no. of cc-related projects/ total no. of projects)	Total no. of projects	Total no. of cc-related projects	% (no. of cc-related projects/ total no. of projects)	Total no. of projects	Total no. of cc-related projects	% (no. of cc-related projects/ total no. of projects)
Agriculture sector	37	32	86.49%	48	42	88%	38	33	86.84%
Civil Defence	3	3	100.00%	3	3	100%	3	3	100.00%
Development Authorities/Research and Dev.	30	11	36.67%	42	20	48%	18	10	55.56%
Education	119	117	98.32%	133	131	98%	96	95	98.96%
Environment/Forest/ Fisheries/Wildlife	31	30	96.77%	47	46	98%	23	23	100.00%
Health	31	26	83.87%	30	28	93%	22	22	100.00%
Industries/Minerals	43	6	13.95%	54	12	22%	22	1	4.55%
IT	22	9	40.91%	27	9	33%	14	5	35.71%
Local Govt. and Rural Dev.	24	12	50.00%	21	12	57%	13	7	53.85%
Physical Planning and Housing	69	20	28.99%	103	44	43%	59	22	37.29%
Power	42	18	42.86%	60	20	33%	48	15	31.25%
Social Welfare and Women Dev.	7	4	57.14%	7	5	71%	6	5	83.33%
Transport and Communication	326	322	98.77%	399	353	88%	308	302	98.05%
Rehabilitation and foreign-funded projects	-	-	-	9	2	22%	-	-	-
<b>Total</b>	<b>784</b>	<b>610</b>	<b>77.8%</b>	<b>983</b>	<b>727</b>	<b>74.0%</b>	<b>670</b>	<b>543</b>	<b>81.0%</b>

Figure 8.6a shows department-wise trends in the share of outlays on climate proofing of projects with respect to total outlays on climate proofing of the region.

- i) The departments of Transport and Communications, Power and Environment have double-digit shares in overall climate expenditures, ranging from 10.8 to 37 percent. However, these expenditures vary over the three-year period, depending on the type of projects undertaken.
- ii) Though the climate expenditures are in single digits for the remaining departments, an increasing trend in climate shares is observed for the Agriculture, Development Authorities, and Education Departments.

Figure 8.6b shows the share of each department's

climate-proof spending in relation to its total outlays (BEs) on all projects. To reiterate, this ratio is applied to total current expenditures to obtain an estimate of current expenditures on climate-related projects. Note the following:

- i) Of 14 departments, the actual spending on the climate proofing of projects implemented by 4 departments (Agriculture, Civil Defence, Environment and Health) has been consistently above one-fourth of their total spending on projects. It fluctuated between 0 and 37 percent during the three years in the Power and Social Welfare Departments.
- ii) The shares of expenditures on climate proofing in total capital spending shows a rising trend only in the Environment, Local Government and Rural Development and Social Welfare and Women Development Departments.

Figure 8.5: AJK - Mean relevance

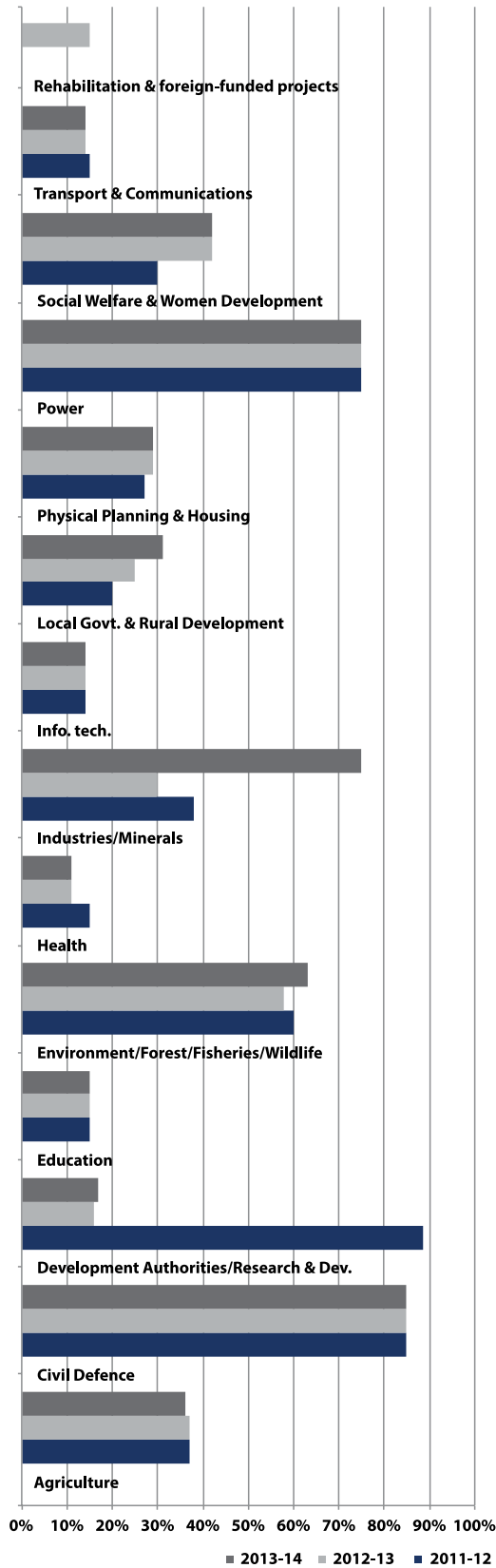
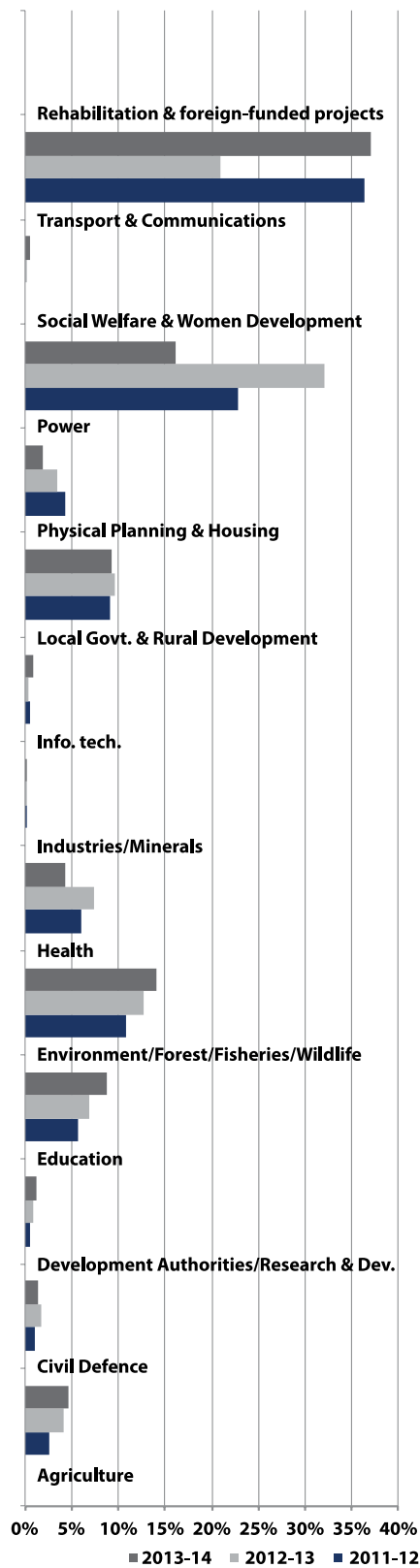
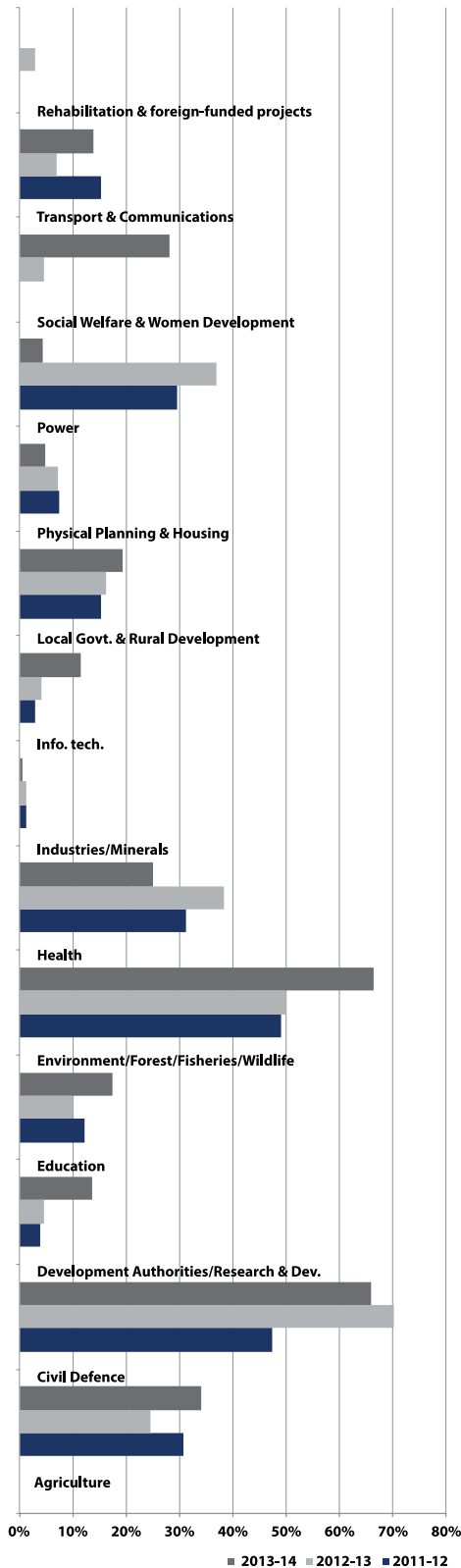


Figure 8.6a: AJK - CC-weighted actual expenditure as a percentage of total CC-weighted actual expenditure



**Figure 8.6b: AJK - CC-weighted actual expenditure as a percentage of budgeted estimates**



**8.4.3 AJK: Climate-relevant expenditure in the development and current budget**

Table 8.18 brings together earlier pieces of information on projects, climate relevance weights and department-wise spending into an aggregate for the region. Capital spending on the climate proofing of projects increased from PKR 1,365 million to PKR 1,760 million at an AAGR of 8.5 percent. As a ratio of overall budgeted capital spending in the region, the climate expenditures indicate a slow rising tendency with fluctuations in the range of 13.7–16.8 percent.

The climate-proofed derived estimates of current expenditures increased from PKR 2,745 million in 2011/12 to PKR 5,203 million in 2013/14 at an AAGR of 21.3 percent. As a percentage of overall budgeted current expenditures, the climate-proofed current expenditure estimates ranged from 7.6 to 14.1 percent during the three years.

The share of total expenditures (development and current) on climate varied from 9.2 to 14.0 percent in the total public sector budget of the AJK region. These ratios compare favourably with GB (15.7–19.9 percent) and FATA (11.2–13.9 percent).

**8.5 COMPARISON OF REGIONS IN RELATION TO CLIMATE CHANGE BUDGETS**

For 2013/14, Table 8.19 summarizes key metrics in relation to the CC response in each of the three regions plus KP, which was analysed in this Chapter and the previous Chapter. The percentage of projects that have climate relevance is fairly similar across the three regions and KP, implying a similar climate response. Except for GB, the share of climate-proof expenditure in total size of climate-related projects is almost the same. The share of outlays spent on climate proofing of projects with respect to total development expenditure varies from 11.7 to 23.3 percent. It allows the two regions to be more flexible and responsive to demands for the competing use of funds, leading to smaller climate expenditures as internal resources are raised in KP and AJK to finance a portion of budgets.



**Table 8.18: AJK - Three-year summary of expenditure ratios**

<b>Development expenditures (PKR millions)</b>	<b>2011/12</b>	<b>2012/13</b>	<b>2013/14</b>
CC-weighted actual development expenditure (a)	1,365	1,307	1,760
Total budgeted development expenditure (b)	8,284	9,547	10,500
Ratio - (a)/(b)	16.5%	13.7%	16.8%
<b>Current expenditure (PKR millions)</b>			
CC-weighted actual current expenditure - c	2,745	5,652	5,203
Total budgeted current expenditure - d	36,265	40,050	45,185
Ratio - c/d	7.6%	14.1%	11.5%
<b>Total expenditures (PKR millions)</b>			
CC-weighted actual development expenditure	1,365	1,307	1,760
CC-weighted actual current expenditure	2,745	5,652	5,203
Total CC-weighted actual expenditures - (e)	4,110	6,959	6,963
Total budgeted development expenditure (ADP)	8,284	9,547	10,500
Total budgeted current expenditure	36,265	40,050	45,185
Total budgeted expenditure - (f)	44,549	49,597	55,685
Ratio - (e)/(f)	9.2%	14.0%	12.5%

**Table 8.19: Comparison of climate response indicators for GB, FATA, AJK and KP, 2013/14**

<b>Climate response budget indicators</b>	<b>Federally administered regions</b>			<b>KP</b>
	<b>GB</b>	<b>FATA</b>	<b>AJK</b>	
Percentage of projects with climate relevance	75.9%	83.1%	81.0%	75.4%
Share of climate-related expenditures to total size of climate-related projects	40.5%	23.1%	20.3%	20.7%
Share of climate-proofed expenditures to development expenditure	23.3%	20.2%	11.7%	14.9%
Share of climate-related expenditures to total budget (development + current)	19.9%	11.6%	12.5%	7.14%

## 8.6 INSTITUTIONAL ASSESSMENT OF FEDERALLY ADMINISTERED REGIONS

CC requires actions to be taken in many policy sectors, considering the social and ecological aspects of Pakistan. The domains of poverty reduction, rural development and agriculture, disaster management and energy security are interlinked in policy and institutions, providing an intricate backdrop to the political economy of CC. This is reported in other sections of this report, but is especially valid for the federally administered regions considered here.

Pakistan's water sector is vulnerable to CC as 70 percent of the freshwater supply in the country is served by river flow; the rest is provided mainly by rainfall, depending on the monsoons. River flows are dependent to a large extent on glacier and snow melt from the three mountain ranges (the Hindukush, the Karakoram and the Himalayas)

concentrating in GB, AJK and KP. The draft NSDS notes that the relative forest cover area is one of the lowest in the world and low even within South Asia, with a high deterioration rate. Most of the forest area is concentrated in the northern part of the country i.e. KP, GB and AJK, which comprises coniferous and scrub forest, which provide an important function for watershed integrity.

Discussions in AJK and GB reflected the inadequacy of incentives and resources for climate proofing these resources in light of projected CC. In AJK and GB, we were told "AJK, GB, KP are watersheds but not beneficiaries like downstream agricultural areas. Shouldn't we be paid for the benefit of the downstream population, at least, to maintain these natural resources?" In contrast to GB and AJK, FATA is arid and mountainous, marked traditionally by a pastoral economy with rain-fed agriculture. FATA also has the lowest share of total budget which is

climate sensitive, in comparison with GB and AJK, although it is still much higher than KP province.

Administratively, GB and AJK have their own administrative departments dealing with subjects including environment, planning and finance. Institutionally, these are governed by the GB Council and AJK Council. In this regard, all legislative acts and policies are presented to the AJK and GB Legislative Assemblies as well as the two councils. The Ministry of KANA is the Secretariat for both of the councils and the Secretary of KANA serves as an ex-officio member on both councils. CC is not mentioned as a subject on the Legislative Lists for AJK and GB. The Gilgit-Baltistan Empowerment and Self-Governance Order, 2009 lists 'environmental pollution and ecology' in the Fourth Schedule as part of the GB Assembly Legislative List. In the case of AJK, any subject not on the Council Legislative List is a subject of legislation for the AJK Assembly. However, it is important to remember that devolution through the 18th Amendment does not extend to these regions and therefore, federally legislated laws and policies remain valid.

### 8.6.1 Policy instruments and mechanisms

As explained in Chapter 3, the 18th Amendment devolved the subject of 'environmental pollution and ecology'. The NCCP remains the overarching policy document to align CC activities in the regions. The NCCP recognizes both deforestation and water stress as climate vulnerabilities facing the country (NCCP, 2012). Accordingly, the Framework for the Implementation of the NCCP recommends mitigation (forests) and adaptation (water) actions. The draft NSDS also emphasizes water scarcity and forestation as issues to be addressed by developing an integrated approach. Both the draft NSDS and the NEEDS (study) recognize the regions—specifically GB and AJK—and parts of KP as ecological reservoirs. Some of the specific recommendations of the NCCP implementation include:

- Undertaking a survey of water resources in the provinces, including AJK and GB, to assess and accordingly enhance their potential to generate energy.
- Developing a consensus at the national level to

divert funds to GB so that hydropower projects can be initiated that will benefit both local and external communities.

- Setting up CC adaption and mitigation cells in AJK's Departments of Agriculture, Livestock and the EPA.
- Undertaking detailed soil and groundwater quality studies in AJK.
- Constructing small dams, as abundant water is available in GB, for power generation and supply to other parts of the country.
- Enhancing forest cover on uphill watershed areas through rapid afforestation and reforestation measures.
- Conducting glacial lake outburst flood (GLOF)-related research and accordingly developing projects to conserve the glaciers of the northern regions, especially in GB.

The MCC can work with these regions, initially through the Environment Departments and P&DD, to create a negotiated space and ownership for the NCCP and the associated Framework for Implementation. Given the ecological assets of the region, both adaptation and mitigation actions from the Framework can be piloted here to climate proof resources and exploit the potential of renewable energy sources.

### 8.6.2 Implementing climate change: policy, planning and institutions

The regions, AJK, FATA and GB remain within the federal PSDP through the Ministry of KANA and SAFRON. The Federal MPDR is the custodian of the Federal PSDP and the various planning processes leading up to the PSDP remain relevant for public climate investment in the regions. As expanded upon in Chapter 4, these processes also involve the MoF as an important member. Hence, at the federal level, key institutions that are relevant for investment decisions on CC in the regions are:

- The MPDR - responsible for the development of the PSDP in coordination with relevant ministries);
- The MoF - responsible for current and development budgetary allocations;
- The MCC custodian of the Climate Change

Policy of 2012;

- The Ministry of KANA;
- The Ministry of SAFRON.

The elaborate financial analysis above can form the basis of an informed discussion within these institutions. The following are given as examples to consider while taking forward an informed discussion at the Federal level and with the administration of these regions.

The financial analysis shows a focused policy commitment to CC from the Government of GB since the proportion of climate expenditures on investments undertaken by P&DD, Forest, Wildlife and Environment, Food and Agriculture and Water and Power are, on average, higher than in the remaining departments. With 95 percent of CC-relevant expenditures in GB in Water and Power, the ground is well-set for the NCCP Implementation Framework. Our discussions with officials from GB, policy-implementers and the NCCP Implementation Framework recognized a resource constraint in this area, (see above for NCCP). The officials said that while they prioritize within the budget allocated to them through KANA, ensuring a high percentage within the ADP, the demands of the fragile ecosystem require more resources. They saw a need to expand resources under the ADP while keeping or increasing the current percentages as reflected in the climate-relevant expenditure analysis given above. This is in line with the NCCP recommendation on hydropower resources. It is worth mentioning that GB is currently revising its 2007 GB Hydropower and Renewable Energy Policy. Currently, the policy considers projects up to 50 MW within the PSDP. The policy revision is looking to expand and could therefore provide a possible entry point.

At the GB institutional level, along with Water and Power and P&DD, the EPA, Environment Department and Wildlife and Forest Department seem relevant for CC as per the financial analysis and have also been mentioned as implementing institutions in the NCCP Implementation Framework.

Commitment to forestry in AJK is evident from the exploratory and analytical work undertaken with collaboration from the Pakistan Forestry Institute (PFI). The SWOT<sup>107</sup> analysis carried out by the PFI in 2013 recommends a forest policy and legal provisions to safeguard and carry out the functions of the Forestry Department as per the current rules of business. These functions include watershed management and reforestation, providing an opportunity to build on in line with the NCCP Implementation Framework recommendations (given above).

However, the NCCP consultations do not mention FATA, which is mentioned in the draft NSDS in the context of the Afghan exodus. The MCC is well-positioned to promote adequate measures to bring the FATA Secretariat,<sup>108</sup> initially through the Ministry of SAFRON, into the fold of the Framework of Implementation more proactively. The Directorates under the FATA Secretariat include agriculture, irrigation and forests, which may provide possible institutional entry points in the short term.

### 8.6.3 Mainstreaming climate change

While each region has its own set of opportunities and challenges in policy response, implementation and mainstreaming the common challenge remains within the overarching control of a Federal Ministry in the case of AJK and GB, and the FATA Secretariat in the case of FATA. The opportunity is for the Federal Government to use demonstration models across the region through enhanced public sector financing as an incentive. In addition, similar to the Federal level and KP province, current climate-relevant decisions in the regions continue to be taken in different policy areas without much attention to policy coherence for climate proofing.

In the overview analysis carried out as part of this work, GB seems more coherent than others in its focus and climate-sensitive component of its budget (nearly 20 percent of total budget). However, financial constraints and public sector capacity issues seem to limit the reach. From our

107. Pakistan, Pakistan Forest Institute (PFI), Third-Party Evaluation of Forestry Resource Development in Azad Jammu and Kashmir: Strengths, Weaknesses, Opportunities and Threats Analysis of Forest Department and Azad Kashmir Logging and Sawmill Corporation (Peshawar, 2013). Available from <http://pndajk.gov.pk/Documents/evaluation%20reports/forest%20evaluation%20reports/05%20Strengths,%20Weaknesses,%20Opportunities%20and%20Threats%20Analysis.pdf>.

108. FATA is under the executive authority of the President of Pakistan as per article 247 of the Constitution of Pakistan, 1973. The FATA Secretariat has supported the Agent of the President and the Governor of the province in administering FATA under the overall coordination of the Ministry of SAFRON since 2006.

discussions with GB officials, it was clear that they understood themselves as the first in line to be affected by CC. It was also clear that they are, therefore, keen to change that into being the first line of defence. “The change in seasonal patterns and climate that you feel today have affected us five years back and the magnitude for our fragile economy is much more” (P&DD official). The Government of GB seemed open and keen to climate proof their infrastructure and protect ecosystem functions from projected climate impacts. A more comprehensive approach to include and interlink poverty reduction, rural development and agriculture, disaster management, energy security to demonstrate a workable model seems to exist in GB.

In AJK, support for an integrated natural resource management-based forestry policy (that builds on the NCCP) will demonstrate the delivery for policy coherence across the most significant climate-sensitive sectors.

The work of the FATA Secretariat is difficult, especially when it comes to allocating public sector development funds across myriad needs. However, international policy research on the political economy of CC in transition regions points to the need for making CC an important element of a holistic approach. Given the current mix of finances (financial analysis above) and activities, there are potential entry points to mainstreaming by climate proofing key infrastructure development across sectors. The FATA Secretariat (Public Health and Engineering) is also undertaking solar-based project for local amenities like streetlights. These can be explored further for future policy directions and then rolled out.

In conclusion, it is important to recognize that each of these three regions presents a unique set of institutional and socio-ecological nuances. FATA's social ecology and institutional arrangement differ from AJK and GB. While there are ecological similarities between AJK and GB, the GB council and Legislative Assembly are still nascent in comparison to AJK. The MCC will therefore need to not only establish the importance of CC for the development of these regions, but also be able to provide technical backup as per the unique and distinct needs of the three regions.

## 8.7 FINDINGS AND CONCLUSIONS

- The federal climate budget analysis in Chapter 6 included the Ministry of KANA (responsible for AJK and GB) and SAFRON (responsible for FATA). However, details of the federal expenditure through (mainly) block grants are of limited resolution in assessing the climate response in these regions. Thus, a more detailed analysis was made for just three regions (AJK, GB and FATA).
- Fiscal transfers from the Federal Government to these three regions represent approximately 2–3 percent of the federal budget. GB and FATA are entirely dependent on this federal transfer. However, AJK raises 43–48 percent of revenues through internal sources.
- The development budget accounts for 25–30 percent of the total budget in GB. Investments in infrastructure (Works Department) and water and power (Water and Power Department) accounted for 79–89 percent of the total development budget (2011–2014 figures).
- The proportion of CC-related projects in the overall development portfolio was in the range of 65–76 percent in GB. Of the total climate expenditures, the Water and Power Department was responsible for 70–95 percent. The proportion of climate expenditures on investments undertaken by P&DD, Forest, Wildlife and Environment, Food and Agriculture and Water and Power are, on average, higher than in remaining departments. There was no reliable trend in the climate budget and overall, 20 percent of the GB budget was climate related.
- The development budget accounts for 41–48 percent of the total budget in FATA. The allocation of this budget to departments was highly variable over the studied years (2011–2014). In 2014, the largest allocations were in departments responsible for Education (21 percent of total budget), Works (20 percent), Services and Administration (18 percent) and Planning and Development (10 percent).
- The proportion of climate-related development projects in FATA ranges from 60 to 83 percent, with the highest proportions in Forest and

Wildlife, followed by Water and Power and Works, although there is considerable annual variation. Around 85–90 percent of the climate budget was delivered by four departments: Education, Forest, Wildlife and Environment, Works and Services and Administration. Overall, 12 percent of the FATA budget was climate related.

- In AJK, the development budget, which is funded from federal grants, represents 18–19 percent of the total budget with 40 percent or more going to Transport and Communications. Six of the fourteen departments have climate-related aspects in over 80 percent of their development projects, and overall, between 74 and 81 percent of development projects are climate related.
- The Transport and Power Departments are consistently the institutions with the highest absolute climate-related expenditure. However, the highest proportional climate-related departmental spending was from Civil Defence and Environment, Forestry and Fisheries, Agriculture and Health where it is generally over 30 percent of the total budget. The climate budget increased from 9 to 14 percent of the total AJK budget from 2011/12 to 2013/14.
- The percentage of projects that have climate relevance is fairly similar across the three regions (and KP province) implying a similar climate response. The GB climate budget is dominated by infrastructure (Water and Power). This is similar in AJK (where Transport and Power dominate climate spending). However, in FATA, the climate budget was more widely spread (Education, Forest, Wildlife and Environment, Works Department and Services and Administration Department).
- As a proportion of the total budget in the three regions, the climate budget varied from 12 percent (FATA) and 13 percent (AJK) to 20 percent (GB). This was higher than the corresponding figure for KP (7 percent of total provincial budget) and the Federal budget (6 percent).
- The GB and AJK territories are key watershed and forestry areas. They moderate southerly riverine flow and are therefore sensitive to climate effects. FATA is arid and mountainous and is traditionally marked by a pastoral economy with rain-fed agriculture. It has the lowest share of the total budget that is climate sensitive, in comparison with GB and AJK, although it is still much higher than KP.
- GB has the most focused policy commitment for CC with the highest expenditure and a focused expenditure in the Water and Power sector. Linking this initiative both within the revision of the GB power sector policy and across wider policy revisions in other sectors (such as poverty reduction, disaster management and rural development) would help move the climate response forward. Similarly, possible entry points for further fulfilment of the NCCP in other regions are identifiable.





09

## CONCLUSIONS AND RECOMMENDATIONS

The CPEIR is the first attempt in Pakistan to gauge the level of climate-related expenditures as a proportion of the overall budget; it identifies where they are allocated across the range of climate response activities. In doing so, the exercise brought together many different stakeholders from across the Government in understanding and examining the level of climate public expenditure, as well as the institutional and policy context within which Pakistan's response to CC is taking place. It highlights, among other things, the crosscutting nature of CC and its impact across different sectors, thereby requiring a comprehensive response from different parts of the Government. It emphasizes in particular the finance-related components of CC, i.e. the way in which resources are allocated and spent in different sectors at the provincial and regional level.

This section presents the main findings from the analysis and suggests a number of recommendations that will help strengthen the governance of CC finance in Pakistan in the future.

### 9.1 EXPENDITURE FINDINGS AND CONCLUSIONS

The CPEIR study concludes that Federal climate-related expenditures (development and current budget) ranged between 5.8 and 7.6 percent of total federal expenditures in the four studied years. The relative proportion of the climate-relevant budget spent on adaptation and mitigation varied significantly across studied years; adaptation varied between 25 and 60 percent and mitigation between 30 and 71 percent (combined adaptation and mitigation benefits were a maximum of 11 percent). The variance and inconsistent trends in spending within adaptation and mitigation

and the oscillating balance between adaptation and mitigation could be attributed to changing priorities of the Government, the 18th Amendment and natural calamities which tilt the balance towards adaptation.

In terms of the typology of climate-related development expenditure, a majority of the expenditure was in the energy category with mitigation benefits (57 percent, 2013/14 data). Further significant contributions were from the transport category (19 percent, predominantly mitigation), health and social services (9 percent, adaptation), water resources (8 percent, adaptation) and disaster preparedness (5 percent, adaptation). The highest percentage of climate-relevant projects tended to be in the MCC (formerly Ministry of Environment and CCD), Water and Power Division and Kashmir Affairs and Gilgit-Baltistan Division. In terms of actual expenditures, between 60 and 80 percent of the total climate-related actual investment expenditure during the four years is split between two ministries, the MoWP (including WAPDA) and the Cabinet Division (including the Atomic Energy Commission).

In KP, the climate-related development and current budget expenditure was estimated to range between 5.25 percent and 7 percent across the four years under review. Over 98 percent of climate-related investments by KP are adaptation related, which is high compared to the Federal level in which mitigation constituted between 30 and 71 percent in the four studied years. Overall, the percentage of climate-related projects of total projects ranges from 75 to 83 percent during the four analysed years. The degree of relevance obviously varies between mild and high; this is much higher compared to the percentage at the Federal level. In many of the 19 departments under

review, the percent of climate-related projects exceeds 50 percent of the total projects and remains consistently high and stable across the four years.

The projects in the Environment and Forestry Department, Irrigation and Power, Minority Affairs, Population Welfare and Relief and Rehabilitation Department score high in climate relevance. The investments by Agriculture, Food, P&DD, Works and Services, Zakat and Ushr and Science and Technology Departments are considered to be of medium relevance.

In terms of the typology of climate-related development expenditures, transport (28 percent climate-related expenditure), water resources (20 percent), awareness raising (18 percent), disaster preparedness (11 percent) and health and social services (8 percent) make up the largest components.

The financial resources required for a response to CC are substantial. According to a UNFCCC<sup>109</sup> study on Pakistan, the estimate of the cost for mitigation activities up to 2050 stands at \$ 17 billion and the cost of adaptation to CC up to 2050 is estimated at \$ 7 billion–14 billion, annually. The figures are only indicative, but do reflect the quantum of investment and commitment required to improve CC. The resources are also to be aligned and linked with the overall development path of the country to ensure that the benefits of CC investment cut across different sectors. There are, however, a number of challenges related to implementation: overriding and pressing governmental challenges such as security and energy supply, leadership and decision-making to prioritize CC responses, coordination and facilitation of CC across sectors and provinces and the development of sector/provincial CC policies/strategies.

The MoF's role in PFM is crosscutting and critical. It leads the process of finalising non-development expenditures and performs an important role in the approval process of development expenditures. International partners like the European Union (EU), UK Aid and others have provided considerable support for improving institutional capacity for PFM. One of the critical initiatives has been the MTBF, which is now in

place in most ministries and constitutes a major step forward for output-based budgeting; the MoF monitors the budget formulation process for compliance of the ministerial budgets to the strategic objectives of respective ministries. The MPDR at the federal level and P&DD at the provincial level play a key role in development planning. The MPDR in the past has taken steps to mainstream critical issues like gender and environment. The MoF and MPDR therefore need to make concerted efforts to integrate CC into budgetary and planning processes.

## 9.2 POLICY AND INSTITUTIONAL FINDINGS AND CONCLUSIONS

There have been significant developments in Pakistan on CC in the last few years. The Climate Change Policy was adopted in 2012 to ensure that CC was mainstreamed in the economically- and socially-vulnerable sectors of the economy and to steer Pakistan towards climate-resilient development. In 2013, a Framework for the Implementation of the Climate Change Policy was developed as a catalyst for mainstreaming CC concerns into decision-making at the federal and provincial level and to create enabling conditions for integrated climate-compatible development processes. Unfortunately, there has not been much progress on implementation of the Climate Change Policy and the Framework for Implementation. Another important step taken by the Government in February 2015 was upgrading the CCD to the MCC, which provides a good platform for the CC agenda to be steered forward.

The provincial governments also have an important role to play, given the devolution of 'environmental pollution and ecology' to the provinces after the 18th Amendment. Agriculture, health and education have also been devolved to the provinces - the provinces have been provided some discretion in taking up energy projects, as well. This could help the provinces in effective implementation of the CC agenda as all of these sectors possess a climate angle. However, despite devolution, the provinces could be constrained in legislation and regulation of the environment sector if due consideration is not given to the

109. Malik Amin Aslam Khan, Pervaiz Amir, Shakeel Ahmad Ramay, Zuhair Munawar and Vaqar Ahmad, "National economic and environmental development study (NEEDS)", Report (Islamabad, Ministry of Environment, 2011). Available from <https://unfccc.int/files/adaptation/application/pdf/pakistanneeds.pdf>.



policy and institutional linkages of environment and CC with other sectors - some key sectors like energy and communication remain with the Federal Government. KP is the first of the provinces to begin shaping its own environment and CC agenda; it recently launched the GGI. Early actions include policy and operational steps to control deforestation and a drive to plant one billion trees. The KP EPA is proactive in pursuing the CC and environment agenda; a Climate Change Unit was established. Despite these critical initiatives, CC investment may not seem to be adequate because of the war on terrorism, the energy crisis and economic instability. It is important for policy-makers to further deepen their appreciation of the fact that CC forms an essential part of the socioeconomic agenda; ignoring it can have serious repercussions on poverty reduction and social development.

The mandate over CC between different tiers of Government is not very clear because of the evolving institutional framework after the 18th Amendment. The Federal Government is currently steering the process through the MCC, providing a good institutional base. Other than KP, the provinces do not possess any institutions specifically dealing with CC.

Effective linkages between federal and provincial institutions could be developed under the aegis of various bodies such as the IPC Ministry or an inter-provincial commission. Opportunities for harmonization within CC have yet to be exploited, though there are exemplars (such as the EPAs and the NDMA and PDMA) in environmental protection and disaster management. Even though there are no direct reporting relationships between these entities, it does demonstrate federal and provincial uniformity of outlook. Within the Federal Government, the role of the MCC needs to be more pronounced through proactively steering NCCP implementation and the transmission of the policy to the sector ministries. This will help considerably in mainstreaming CC across different sectors and developing the Government's vision. The PEPA appears to be the main instrument used for implementing the CC agenda at both the federal and provincial level. The NCCP and its Implementation Framework are less known, and a

mechanism for the implementation of both has not yet evolved. This is probably because CC has taken a backseat to other issues like energy and security.

The present Government has agreed to an economic reform programme by the IMF which involves taxation reforms, the removal of subsidies for reducing pressure on the economy and a reduction in public sector enterprises losses. The Government has taken measures under this programme for the improvement of the economy, some of which are tied up with the IMF's \$ 6.7 billion programme.

The Government has also published 'Vision 2025', which has been developed to provide direction to economic planners. It will serve steadily as a critical guidepost for the development of an effective strategy and roadmap to reach national goals and aspirations.

There is an increased opportunity to mainstream CC into policy-making, given some useful developments in CC management, improvements in the overall economic environment, a politically stable Government and various reform initiatives.

## 9.3 RECOMMENDATIONS

### A. Integrating CC into budgetary and planning processes

The CPEIR demonstrates that a significant percentage of the public exchequer is allocated to CC. The Federal Government has been expending 5.8–7.6 percent of its budget to CC during the four years under review. However, this is likely happening without the Government realizing the quantum of investment it is making. Sectoral expenditures and programmes are driven by sectoral policies. The lack of a CC angle in many sectors means that the MTBF of different ministries do not account for CC. There has recently been some recognition of CC; the PRSP II (2009) emphasizes CC as a challenge to poverty reduction, which helps in bringing CC onto the broader development agenda. Economic Surveys in the last few years and the ADP 2013/14 do make a mention of CC, which is encouraging. However, a greater emphasis needs to be placed on driving CC and mainstreaming it in different sectors like energy,

agriculture and disaster management.

The MoF, MPDR and MCC need to make concerted efforts to integrate CC into planning and budgeting as the two are currently disparate domains because of institutional arrangements; this weak linkage becomes further fragmented when it comes to crosscutting issues like CC. There is therefore a need to build a nexus of sector plans, the MTBF of sector ministries, the MCC and NCCP and Framework for Implementation.

The MoF and MPDR should help the MCC put the MTBF in place and then ensure that CC-related outputs are made part of the sectoral MTBF. This will correspond to the country's overall PFM reforms on output-based budgeting in a specific area such as CC. The recommendations below will enable output-based approaches for CC expenditures by areas that are required for output-based budgeting reforms, such as:

- Consolidating CC information in a single location to enable policy-driven budget formulation, i.e. the Climate Change Financial Framework (CCFF), which can gradually be integrated with existing MTBF practices;
- Enhancing the role and capacity of the MCC in presenting the overall CC picture in policy discussions and budget decision-making for cross-sector CC initiatives;
- Linking performance (outcomes and outputs) with budget allocations;
- Bringing performance accountability on CC into one locus, i.e. the MCC being policy-wise accountable for a holistic picture in CC. The overall accountability on performance of CC actions and CC policy should rest with the MCC

The flow of international mitigation and adaptation finance to Pakistan have been less than \$ 500 million<sup>110</sup> up to 2013, including bilateral flows, which is much less than the resources required for taking up adaptation and mitigation activities. Currently, apart from the Global Environment Facility (GEF) and other sporadic support from donors like UK Aid, the World Bank and UNDP, Pakistan, unlike Bangladesh and some other countries, has not been able to garner and make effective use of global climate finance. The UNFCCC study referred to earlier estimated the cost of

mitigation and adaptation to be much higher than current Government expenditures and/or international climate finance. This indicates a need for prioritized mainstreaming of CC in the national budget and the need for tapping international CC finance sources.

### 1. Support the MoF in its incorporation of CC in the budget.

There is currently no mechanism to determine the quantum of budget being spent on CC, depriving policy-makers of the landscape of CC expenditure. The ministries/departments/ budget committees do not practice CC-positive selection. The consequence of this is that there is no coherent driver for climate-sensitive budgeting in the PSDP and across sectors. The way in which CC can be articulated and embedded in the various sectors is technical and sector-specific. This needs to develop in concert with MTBF CC-related outcomes/ outputs. The development of technical criteria to support CC-positive budgeting is necessary to support the prioritization and selection process and shift the MTBF and PSDP towards a strengthened climate response. However, this requires good capacity and technical inputs to work successfully across the many areas of Government that are involved. The interventions should begin with the inclusion of CC in the budget call circular letter and lead to developing a system for tracking expenditures. One possible action towards CC mainstreaming is the development of a handbook on public expenditure on climate change.

- Climate tracking through budget codes: Both functional and object classification should be assessed;
- Reviewing the budget call circular and integrating a climate checklist;
- Giving weight to CC in the Priorities Committee;
- Reviewing the MTBF guidelines to integrate a CC context.

### 2. Support CC integration in the planning process (by the MPDR and P&DD).

CC is not a formal part of the planning process. In order to integrate CC into planning, CC appraisal should be included in PC-Is so that the DDWP, PDWP and CDWP can consider this facet at the time of



project approval. At the federal level, the MPDR should, in coordination with the MoF, and at the provincial level, the P&DD in coordination with the Finance Department, should ensure that the MTBF of CC-relevant ministries/departments have CC-related outputs/outcomes. Currently, the MTBFs of sector ministries tend to concentrate on their own sector priorities as the main drivers for the derivation of their planned expenditures. The Government can also consider the inclusion of the CC factor in the M&E formats i.e. PC-III–PC-V.

### 3. Develop a guidebook for planning wings.

Such a document could be used to train officials in filling-out and appraising CC components in the PC-I–PC-V formats.

### 4. Undertake CPEIRs in Balochistan, Punjab, Sindh and five select districts.

The advisory committee of the current CPEIR has suggested doing so will paint a more holistic picture of CC expenditure in Pakistan. A climate-specific expenditure analysis should be carried out for all the provinces and at the national level. The Government may also consider extending the exercise to select districts with UNDP support to identify the commitment and gaps in CC uptake by local governments. An institutional capacity assessment will help identify and implement climate-friendly actions.

### 5. Develop the CCFE. This should provide a framework for prioritizing CC expenditures and possible options to provide resources for funding CC activities. It should also examine options to use taxation as a tool to control CC, e.g., carbon taxes and waivers on alternative energy equipment. It should also delve into the possibility of using such taxes specifically for CC-related expenditures. There are other sources of funding windows like GEF, where the Government does not directly make expenditures, but does have a say in the type of activities and projects that are being planned. There is then the contribution of the private sector, e.g., alternative energy investments. The goal of the CCFE is to present all relevant financial information on CC in a single document that will gradually contribute to CC policy formulation, planning, budgeting,

monitoring and performance assessment processes in the country.

## B. Strengthening the Climate Institutional Framework

CC-related institutions continue to evolve, owing to the increased global emphasis on CC, the gradual increases in local awareness and because of the 18th Amendment. The assignment of responsibilities between the Federal Government and the provincial governments is also in the process of formation and transformation. Policy-making on CC and the implementation of international agreements and conventions is considered to be assigned to the Federal Government. Implementation of CC policy is located at the provincial level. However, there is no effective mechanism for the transmission of the policy to the implementation level, which makes the equation ambiguous. While there is a need to bring clarity on broader issues about the CC mandates of different tiers, institutional responsibilities to steer the NCCP and Implementation Plan should be clearly defined. This includes timelines for different milestones.

**1. Establish an inter-provincial commission.** This is required for synergizing CC efforts, evolving institutions (owing to the 18th Amendment), ensuring compliance with international agreements and conventions, and following up on the NCCP. The inter-provincial commission should be supported by a technical advisory group that should provide data and analysis for informed decision-making. The NCCP has already made provisions to establish such a commission. The IPC Ministry could also serve as a useful forum for clarifying roles and responsibilities.

**2. Enable a legal environment for CC.** There is confusion about the role of provinces and the federation about specific responsibilities for each level. The guiding instrument and legislation is still the PEPA, and there is neither legislation nor a regulatory regime that specifically caters to CC issues.

**3. Account for climate finance investments by NGOs and the private sector.** NGOs are a significant provider of climate-related activities.

Their contributions (even if off-budget) should be taken into account for a more comprehensive picture of climate finance investments in Pakistan (federal and provincial).

- 4. Initiate a policy debate and analytical research for the inclusion of CC as an indicator for fiscal transfer formulae under the NFC.** The uptake of using CC as an indicator could be challenging and there is a need to analyze the efficacy of using CC as an indicator and the implications it may have for different provinces. This will help policy-makers make informed decisions. The debate could be supported by making it part of the sensitization campaign under the communication strategy to underline the importance of CC.

### C. Strengthening institutional CC-relevant entities

The CPEIR concludes that some ministries like Water and Power, the Cabinet Division at the federal level and Agriculture, Irrigation and Power at the provincial level, are making investments in mitigation and adaptation, but without a clear focus, which results in less-than-optimum results. This lack of focus is a result of a disconnect between CC and different sectors, and an inadequate capacity and understanding of CC handling. This capacity gap exists both at the policy and operational level, thus impeding CC mainstreaming into the wider development agenda, sectoral programmes and budgeting thereof. The MCC could have provided this support to the ministries but has not been able to do so. It has had varying levels of ownership from the Government, and there have been several recent changes in the status and nomenclature of the Ministry. KP has demonstrated ownership of the CC agenda and it is necessary that this ownership be taken forward and be aligned in the right direction.

- 1. Strengthening the MCC.** This may be done by providing support in the implementation of the Framework for the Implementation of the Climate Change Policy. In order to ensure accountability and effective monitoring of actions, the MCC should be provided support in integrating framework activities into the MTBF, thereby turning output targets into

KPIs. Institutionally, the MCC is well-placed federally to champion CC if leadership, capacity building and coordination can position CC as an entity outside environment, but within wider Government planning processes. An assessment of the institutional setup of the MCC vis-à-vis its role as the lead on CC policy, is also recommended. Necessary institutional adjustments should be made for it to fulfil its mandate.

- 2. Provide technical support to KP in action plan development for NCCP implementation.** KP should be provided institutional support in the form of legal and regulatory instruments, given its demonstrated interest in CC through the GGI. The action plan should be further linked with the MTBF.
- 3. Provide support to CC-relevant ministries for the incorporation of climate-responsive budgeting.** The CPEIR could serve as one basis for the selection of ministries/departments for capacity building. The capacity building of such ministries to factor in CC-friendly initiatives in planning and budgeting, and subsequently tracking expenditures is important. If phase II of the CPEIR is carried out in time, the Government could plan capacity building exercises of selected functionaries at the local government level, as well.
- 4. Develop synergies between different programmes.** A mechanism should be constituted for all stakeholders for a more rigorous response to the CC challenge. The working group could include representatives of the MCC, the MoF, key relevant ministries, different funding windows like GEF, the private sector and relevant donors. This will help synthesize and develop synergies between efforts from different players and also channelize finances in accordance with Government priorities, thereby helping avoid the duplication of efforts. There are currently different donors working on CC issues. UK Aid is developing a large programme called Disaster Relief and Rehabilitation, UNDP is making interventions through GLOF and GEF, and the World Bank is also working on CC. Synergies need to be built between the Economic Affairs

Division, the MCC and relevant ministries.

**5. Support Parliament in tracking climate investments through domestic and international sources to strengthen its oversight role.** There is a Committee on Sustainable Development within Parliament that is responsible for CC. Parliamentarians in general, and members of the Committee in particular, should be provided support through information sessions, workshops and debates on CC concepts. There is also the possibility of the creation of a specific committee on CC for more focused attention to the issue.

#### **D. Monitoring and evaluating CC-relevant work**

There is currently no mechanism for the identification and monitoring of CC-related expenditures in Pakistan. The CPEIR exercise is an attempt to estimate Government expenditures on the basis of defined criteria. The lack of such a mechanism deprives the Government and independent analysts of an evaluation of Government interest in CC budgetary commitments. A clear assignment of all expenditures is challenging and may partially lead to subjective results. Nonetheless, a system must be developed to enable the Government and other stakeholders to tap CC expenditures through coding and tracking. This will be instrumental in monitoring Government interest in CC and Government capacity to implement CC programmes. It will also help track actual expenditures incurred. Such a system would also demonstrate Government commitment to CC issues.

**1. Work with the CGA and the MoF to develop a coding and classification system.** This will require liaison and capacity building of CC-relevant ministries in the identification of CC expenditure and its subsequent tracking. It will also call for the development of reporting formats. This should be followed by the development of guidelines for classification and capacity building in using the system. The exercise should be carried out in a sequential manner, starting with consultative sessions with stakeholders to determine suitable monitoring modalities; a weightage system or the marker

methodology for categorizing expenditures on the basis of relevance? These decisions will help set criteria and classification systems for a more transparent and accountable budget and expenditure system.

**2. Identify, prioritize and synthesize key adaptation and mitigation activities with budgets and MTBF frameworks of selected relevant ministries.** The Framework for the Implementation of the Climate Change Policy (in light of the NCCP) can be a good starting point to integrate CC into sector priorities, identify activities for adaptation and mitigation, cost the activities, and formally synthesize them into budgetary systems. The Government could simulate the long-term costs of adaptation and mitigation. There is already a UNFCCC study that makes projections on possible annual costs for adaptation and mitigation, but it does not delve into outputs and activities. It will be useful if key adaptation activities could be picked up on a pilot basis, e.g., agriculture, because of its importance to the economy and because of its vulnerability to changing monsoon and weather patterns. Another example is the energy sector where significant investments are being made both on core and alternative energy sources.

#### **E. Sensitizing policy-makers and increasing public awareness on the need for CC investment**

Pakistan is at a nascent stage in taking up the CC challenge. There has been significant CC work in other regional countries such as Bangladesh, Nepal and India. Even though the CPEIR study indicates climate-related expenditures within the Government, CC has not been able to trigger a policy debate on its importance and the implications of ignoring it. Government efforts and commitment and the level of policy discourse over CC financing do not match the challenge that Pakistan faces.

CC is not an entrenched phenomenon at the policy, institutional or operational level. An understanding of CC and the approach to tackle it is therefore weak. Long-term capacity building is required across different tiers of Government (federal to TMA level). This will become even more critical in view of the new systems and processes

that are being proposed to integrate CC into planning and budgeting. The process should begin with arrangements for informed policy-making and subsequently qualified and informed public sector officials.

**1. Sensitize policy-makers and stakeholders to the importance of CC and explain the rationale for CC expenditures.**

Parliamentarians and other key decision-makers do not fully understand the importance of CC that has already materialized in the form of explicit and implicit costs to the economy; it is not yet considered a priority area. It is important for decision-makers to become CC advocates, given Pakistan's vulnerability to CC (floods and rainfall and their associated economic costs). The present Government's commitment to undertaking infrastructure projects and industrialization is also expected to raise carbon emission levels, which makes it all the more important to put mitigation measures in place. Some options are:

- Establishing parliamentary/provincial caucuses that focus on integrating CC in national budgetary systems;
- Developing a communications strategy for informing stakeholders and the public of CC issues;
- Identify a CC ambassador to stress the importance of CC investments.

**2. Develop a media strategy for CC awareness.**

A media engagement strategy could be put in place to disseminate information on the importance of CC investments. This could include documentaries and print and electronic media information.

**3. Recommend that key officials and stakeholders engage with CC institutions in other countries.**

Officials from relevant ministries and departments could be provided

trainings and exposure visits to other countries to understand and observe current trends in mitigation and adaptation systems. This could also result in regional cooperation on integrating CC finance into mainstream processes like planning and budgeting.

**4. Develop a knowledge bank. The Government's and other entities' capacity is limited in terms of CC delivery.**

This is partly because of a lack of professional training and a paucity of CC information. The government should:

- Develop a hub that serves as an information repository of knowledge sources.
- Develop a database of local and international CC programmes and activities to help determine possible funding options.
- Develop a database/information network of ongoing CC seminars and conferences.
- Revisit the GCISC to see if it can perform some of the aforementioned functions.

**5. Commission CC studies for informed policy decisions.** The Government should commission studies in different subject areas of the sector. Possible study areas include the following:

- An exploration of the possibility of using CC as an indicator for incentivizing the sub-national Government towards climate-friendly initiatives and actions.
- An assessment of the causalities between CC and social sector development and poverty reduction. This will strengthen the case for CC expenditures.
- Studies to tap new avenues and align new initiatives with sector priorities, and integrate public revenues with other climate fund windows.
- Studies to examine public-private partnerships for mitigation and adaptation activities.

# APPENDICES

## APPENDIX 3.1: DETAILS OF THE 18TH AMENDMENT

This section describes the significant change in governance from devolution in 2010 and its effect on the positioning of CC in the governmental sector. The 18th Amendment to the Constitution of Pakistan was passed by the National Assembly on 8 April 2010 and by the Senate on 15 April the same year. The President of Pakistan signed it into law four days later.

Before the promulgation of the 18th Amendment, the subject areas under the jurisdiction of the Federal Government and provincial governments were detailed in the form of two lists, the Federal Legislative List and the Concurrent Legislative List. Article 70 assigned the Federal Government exclusive rights and responsibility to legislate in all subjects included in the Federal List. The Concurrent Legislative List contained subjects over which the Federal Government and provincial governments had joint mandates. Subjects not contained in either of the two lists were deemed to be residual functions to be performed by the provinces.

The 18th Amendment abolished the Concurrent List, removing this grey area of joint legislative rights. Some 47 subjects, including 'environmental pollution and ecology', health, education, food, agriculture, irrigation, population, livestock, forestry, biodiversity and conservation and socioeconomic/welfare responsibilities were devolved to the provinces. In terms of CC-related response sectors, this meant that the major sectors, especially in relation to adaptation, were devolved and became provincial responsibilities. While CC is not referred to by name, the key point driving the CC agenda at the provincial level is an assumption by most stakeholders that CC automatically sits

within the mandate of 'environmental pollution and ecology'. This creates a challenge in ensuring that provincial governments are addressing CC as a crosscutting issue. It is not something that can be relegated to the environment department, only.

However, contrary to common perception, the 18th Amendment ensures continuity by adding the following clause to article 270 AA (Declaration and Continuance of Laws, etc.):

"Notwithstanding omission of the Concurrent Legislative List by the Constitution (Eighteenth Amendment) Act, 2010, all laws with respect to any of the matters enumerated in the said List (including Ordinances, Orders, rules, bye-laws, regulations and notifications and other legal instruments having the force of law) in force in Pakistan or any part thereof, or having extra-territorial operation, immediately before the commencement of the Constitution (Eighteenth Amendment) Act, 2010, shall continue to remain in force until altered, repealed or amended by the competent authority". (Article 270 AA, Clause 6)

In terms of CC, this means that although 'environment' was devolved to the provinces by the 18th Amendment, the continuance of the Federal role in environment and CC was ensured through a continuance. Thus, although devolution had abolished the shared responsibility of the Concurrent List, the shared responsibility was maintained through the devolution of the Concurrent List to the provinces and through Article 270 AA of the Constitution (continuance requirements). This situation has existed since devolution in 2010, and to date does not seem to have been challenged or clarified by federal or provincial bodies. The changing arrangement due to devolution is summarized in Table A3.1.

Under the 1973 Constitution, the subject of



'environmental pollution and ecology' was part of the Concurrent Legislative List, which meant that both the federal and provincial assemblies had the powers to make laws on this subject. As per the ministry's rules of business, CC-related activities also fell under the Ministry of Environment. The Federal Government and the provincial governments shared responsibilities for implementation of the federally-enacted PEPA,

1997. The law was federal but was applicable all over Pakistan and the provincial EPAs were responsible for executing it in their respective provinces. The federal ministry, however, took a lead role on the implementation of international agreements and treaties relating to environment and CC. The role and ownership of the Provincial Government on environmental issues remained diluted because of this.

**Table A3.1: Changes in responsibility between the Federal and provincial levels of government before and after devolution and the 18th Amendment in 2010**

Positioning of environment and CC in italics		
Responsibilities	Before	After
Federal responsibility	Federal Legislative List	Revised Federal Legislative List, Part I and Part II. The Federal Government has exclusive domain over Part I. All policy decisions on subjects in Part II shall be decided by the CCI
Shared federal and provincial responsibility	Concurrent List	
Provincial responsibility	Residual subjects not mentioned in either list	All residual subjects not mentioned in the Federal Legislative List

Source: Adapted from UNDP (2011): The Eighteenth Amendment in the Constitution of the Islamic Republic of Pakistan: Implications, Opportunities and Challenges

#### APPENDIX 4.1: DEVELOPMENT OF THE MPDR

The Planning Commission of Pakistan was set up in 1958 and given the responsibility of preparing Annual Plans and ADPs (a function it still carries out as the MPDR). It remained at the centre of all development activities in the country through the 1960s and 1970s. Indeed, the Head of the Commission<sup>112</sup> was considered very influential and has been led by people like Dr. Mehboobul Haq. The political economy around the development discourse in Pakistan has since shifted. This

has resulted in a repositioning of the Planning Commission within the institutional hierarchy.<sup>113</sup> The discussions and attempts at restructuring the Commission have long been highlighted among development practitioners in Pakistan. In 2006, the Planning Commission underwent a major revamp with the aim to re-establish it as the apex planning and coordination body. The 18th Amendment<sup>114</sup> called for further changes. The Planning Commission, while still in the throes of change, has been renamed the Ministry of Planning, Development and Reforms (MPDR) with an aim to align it better to emerging national needs.

#### APPENDIX 4.2: DEVELOPMENT AND ENHANCEMENT OF THE ACCOUNTING AND AUDIT FUNCTION

The legislative framework for PFM is embedded in the 1973 Constitution. In 2001, the accounting function was separated from the audit function through Presidential ordinances and the Office

of the CGA was established. In the same year, a devolution process created an additional tier of Government at the district level and two administrations at the tehsil and union council levels. Legislative scrutiny of public accounts is conducted by PACs at the federal and provincial levels. With respect to the Public Audit Law, the

112. The Deputy Chairman of Planning, who heads the MPDR, was given the status of a minister in 1961. This was also when the Project Implementation Unit was shifted to the Planning Commission (now the MPDR).

113. In 1982, the Secretary of Finance, Secretary of the Economic Division, Secretary of the Planning and Development Division, Member of the Planning and Development Division, Additional Secretary of the Planning and Development Division and Chief Economist of the Planning and Development Division were designated ex-officio members of the Commission.

114. The subjects on the Concurrent List are provincial subjects to legislate and invest in since the 18th Amendment.

Pakistan (Audit and Accounts) Order 1973, P.O. 21 of 1973 was repealed in 2001 and replaced by two sets of ordinances that also caused the bifurcation of the audit and accounting functions - the Auditor-General of Pakistan Ordinance, 2001 and the Controller General of Accounts Ordinance, 2001.

The GoP has initiated a series of changes in PFM processes in the last few years, supported by the World Bank-financed PIFRA. Some important changes are as follows:

- a) The Government introduced a NAM along with an IMF government finance statistics (GFS) compliant Chart of Accounts. The NAM has established a framework for the progressive introduction of commitment accounting which can eventually lead to accounting on an accrual basis.
- b) Strengthening internal audits in Government

departments. Chief Finance and Internal Auditors (CFAOs) were assigned to 15 line ministries at the Federal Government level in 2006.

- c) The auditing methods used have been updated under the auspices of PIFRA. Audit quality has improved as the Federal Government and provinces are using the Financial Audit Manual (2005) which is generally compliant with the International Standards on Auditing (ISA).
- d) PACs have been re-established for the Federal Government and all four provincial governments in Pakistan (2004). The Committees have met at irregular intervals to review audit reports and audited accounts. In a number of cases, they imposed sanctions on, and generated cash recoveries from defaulting public officials, including those responsible for implementing the projects.

## Appendix 6.1: Overall projects and climate-related projects by ministry

Complete ministries	2010/11			2011/12			2012/13			2013/14		
	No. of projects	CC-related projects	%	No. of projects	CC-related projects	%	No. of projects	CC-related projects	%	No. of projects	CC-related projects	%
Cabinet Secretariat, AEC	173	165	95.4	266	75	28.2	58	31	53.4	112	67	59.8
Ministry of Communications, NHA	119	112	94.1	124	116	113.7	81	78	96.3	98	95	96.9
Ministry of Defence	65	32	49.2	39	23	59.0	24	16	66.7	22	12	54.5
Ministry of Federal Education and Professional Training	95	80	84.2	8	5	62.5	10	7	70.0	11	2	18.2
Ministry of Environment	36	36	100.0									
MoF, Revenue, Economic Affairs, Statistics and PVT	336	156	46.4	383	181	47.3	252	174	69.0	232	100	43.1
Ministry of Food and Agriculture	94	59	62.8	21	14	66.7				22	22	100.0
Ministry of Health	215	86	40.0							41	41	100.0
Ministry of Industries and Production	49	1	2.0	54	8	14.8	36	16	44.4	36	3	8.3
Ministry of Interior and Narcotics Control, Ministry of Population Welfare	257	55	21.4	172	45	26.2	105	27	25.7	134	51	38.1
Ministry of KANA	15	12	80.0	20	17	85.0	14	10	71.4	11	7	63.6
Ministry of Petroleum and Natural Resources	14	1	7.1							7	2	28.6
Ministry of Science and Technology	108	41	38.0	56	34	60.7	66	29	43.9	55	38	69.1
Ministry of Women Development	28	15	53.6									
Ministry of Local Government and Rural Development	123	17	13.8									
Ministry of Ports and Shipping	6	2	33.3	3	1	33.3	2	2	100	2	2	100.0
Defence Production Div./States and Frontier Div.	390	251	64.4	240	164	68.3				209	37	17.7
Ministry of Textile Industries	4	1	25.0	4	2	50.0	5	2	40.0			
Ministry of Special Initiatives	3	2	66.7									
Ministry of Livestock and Dairy Development	27	21	77.8									
Ministry of Economic Affairs	43	7	16.3	43	1	2.3	2	1	50.0	35	3	8.6
Ministry of Commerce				17	4	23.5						
Ministry of IT and Telecommunications				66	13	19.7				29	5	17.2
Ministry of IPC				18	8	44.4	9	6	66.7	29	3	10.3
MCC				8	8	100.0	6	6	100.0	6	6	100.0
Ministry of National Food Security and Resources				7	6	85.7	8	8	100.0			
Capital Administration and Development Div.							14	7	50.0	28	21	75.0
Federal Tax Ombudsmen							1	1	100.0			
National Heritage and Integration Div.										8	3	37.5
Water and Power (water sector and power sector)	162	105	64.8	153	92	60.1	185	84	45.4	134	107	79.9
Railways Div.	29	24	82.8	29	19	65.5	37	21	56.8	35	26	74.3
Housing and Work Div.	105	92	87.6	49	14	28.6	56	22	39.3	74	18	24.3
HEC			100.0			100.0			100.0			100.0

**Appendix 6.2: Climate relevance weight for each ministry**

Federal ministries/divisions	2010/11	2011/12	2012/13	2013/14
	<b>Mean (avg)</b>			
Cabinet Div., ERRA, PAT	96%	21%	48%	36%
Capital Administration and Development Div.			24%	17%
MCC		94%	100%	100%
Communications, NHA	31%	19%	16%	18%
Defence Div., SUPARCO	43%	25%	39%	46%
Economic Affairs and Statistics Div.	83%	10%	25%	15%
Finance, Revenue, Economic Affairs and Statistics Div., P&DD	23%	31%	24%	24%
HEC	12%	12%	12%	13%
Industries Div.	25%	41%	22%	38%
IT and Telecommunications Div.		14%		10%
Inter-Provincial Coordination Div.		18%	32%	10%
Interior and Narcotics Control Div.	12%	20%	33%	23%
Kashmir Affairs and Gilgit-Baltistan Div.	51%	37%	64%	60%
National Food Security and Research Div.	40%	50%	51%	49%
National Health	14%			28%
National Heritage and Integration Div.				15%
Professional and Technical Training Div.	12%	12%	19%	10%
Petroleum and Natural Resources Div.	50%			75%
Railways Div.	38%	0%	25%	25%
Science and Technological Research Div.	79%	27%	37%	29%
States and Frontier Regions Div.	22%			29%
Water and Power Div. (water and power sector)	89%	58%	59%	64%
Housing and Works Div.	23%	20%	23%	22%
Ports and Shipping Div.	20%	15%	10%	100%

<b>Appendix 6.3a: Proportion of climate-relevant development expenditure by ministry (proportion presented in relation to total development budget for each ministry)</b>				
Federal ministries/divisions	2010/11	2011/12	2012/13	2013/14
	<b>CC-weighted actual expenditure/total sum CC-weighted actual expenditure</b>			
Cabinet Div., ERRA, PAT	12.33%	46.64%	48.02%	29.44%
Capital Administration and Development Div.			0.01%	0.03%
MCC	0.19%	0.02%	0.04%	0.01%
Communications, NHA	4.29%	7.95%	7.77%	6.41%
Defence Div., SUPARCO	0.10%	1.29%	0.17%	0.04%
Economic Affairs and Statistics Div.	0.00%	0.01%	0.00%	0.44%
Finance/Revenue/Economic Affairs and Statistics Div./P&DD	6.94%	8.91%	9.41%	2.27%
HEC	1.36%	0.91%	1.08%	1.25%
Industries Div.	0.01%	0.05%	0.05%	0.01%
IT and Telecommunications Div.		0.01%		0.00%
Inter-Provincial Coordination Div.		0.03%	0.01%	0.00%
Interior and Narcotics Control/Ministry of Population Welfare	1.05%	0.11%	0.60%	0.12%
Kashmir Affairs and Gilgit-Baltistan Div.	0.16%	0.12%	0.77%	0.14%
National Food Security and Research Div.	0.82%	0.01%	0.09%	0.11%
National Health	1.79%			4.82%
National Heritage and Integration Div.				0.00%
Professional and Technical Training Div.		0.08%	0.31%	0.08%
Petroleum and Natural Resources Div.	0.00%			0.00%
Railways Div.	0.91%	3.71%	2.97%	7.08%
Science and Technological Research Div.	0.07%	0.11%	0.13%	0.10%
States and Frontier Regions Div.	1.02%	1.29%		0.26%
Water and Power Div. (water and power sector)	0.07%	29.74%	27.68%	47.11%
Housing and Works Div.	0.45%	0.13%	0.91%	0.28%
Ports and Shipping Div.	0.00%	0.00%	0.00%	0.00%



<b>Appendix 6.3b: Proportion of climate-relevant development expenditure by ministry (proportion presented in relation to PSDP + outside PSDP total allocation)</b>				
Federal ministries/divisions	2010/11	2011/12	2012/13	2013/14
	<b>CC-weighted actual expenditure/PSDP total allocation</b>			
Cabinet Div., ERRA, PAT	9.38%	51.32%	81.84%	78.66%
Capital Administration and Development Div.			1.82%	4.23%
MCC	92.23%	32.05%	38.49%	32.25%
Communications, NHA	14.78%	25.71%	20.39%	19.02%
Defence Div., SUPARCO	6.75%	3.67%	6.91%	1.66%
Economic Affairs and Statistics Div.	25.00%	9.07%	0.84%	0.00%
Finance/Revenue/Economic Affairs and Statistics Div./P&DD	38.86%	27.25%	18.68%	17.31%
HEC	12.00%	8.39%	9.12%	12.72%
Industries Div.	0.57%	2.76%	4.64%	2.26%
Information Technology and Telecommunications Div.		1.17%		0.74%
Inter-Provincial Coordination Div.		53.68%	5.11%	1.63%
Interior and Narcotics control/Ministry of Population Welfare	0.40%	2.19%	12.28%	3.29%
Kashmir Affairs and Gilgit-Baltistan Div.	9.00%	0.87%	5.11%	0.87%
National Food Security and Research Div.	29.46%	15.10%	23.25%	28.19%
National Health	13.32%			35.08%
National Heritage and Integration Div.				15.63%
Professional and Technical Training Div.	10.77%	3.36%	14.16%	2.91%
Petroleum and Natural Resources Div.	1.35%			0.00%
Railways Div.	18.06%	32.04%	17.35%	42.86%
Science and Technological Research Div.	15.43%	12.60%	13.16%	8.92%
States and Frontier Regions Div.	1.50%	16.71%		2.63%
Water and Power Div. (water and power sector)	57.32%	56.12%	48.10%	35.01%
Housing and Works Div.	17.53%	12.29%	46.68%	13.90%
Ports and Shipping Div.		0.00%	13.16%	0.05%

### APPENDIX 8.1: THE ROLE OF POLITICAL AGENTS

Each tribal agency is administered by a Political Agent who is assisted by a number of Assistant Political Agents, tehsildars (administrative heads of tehsils or sub-districts), naib tehsildars (deputy tehsildars) and members of various local police (khassadars) and security forces (Levies, scouts). The Political Agent oversees the working of line departments and service providers. He is responsible for handling inter-tribal disputes over boundaries or the use of natural resources. He also regulates trade in natural resources with other agencies or settled areas.

The Political Agent plays a supervisory role for development projects and chairs an agency development sub-committee, comprising various Government officials, to recommend proposals and approve development projects. He also serves

as project coordinator for rural development schemes. Frontier Regions (FRs) are administered by deputy commissioners of the respective settled districts, who exercise the same powers in the FR as the Political Agent does in a tribal agency.

The tribes regulate their own affairs in accordance with customary rules and unwritten codes, characterized by collective responsibility for the actions of individual tribesmen and territorial responsibility for the area under their control. The Government functions through local-level tribal intermediaries i.e. Maliks (tribal representatives) and lungi-holders (representatives of sub-tribes or clans), who are influential members of their respective clans or tribes.

Source: Government of the Federally Administered Tribal Areas, "Administrative system", Undated. Available from <http://fata.gov.pk/Global.php?ild=29&fld=2&pld=25&mlid=13>.

## Appendix 8.2: Account lines and year-wise details of fiscal transfers to AJK, FATA and GB appearing in MoF budgetary documents

Demand #	Account Head	Budget Estimates (million Rs.)			
		2013-14	2012-13	2011-12	2010-11
65	Frontier Constabulary	6,245	6,236	5,631	5,104
69	Kashmir Affairs & Gilgit Baltistan Div	258	245	228	225
70	Other Expenditure KA & GB Div	841	800	15,768	12,000
71	GB	229	211	8,271	6,405
99	States and Frontier Div	84	73	61	50
100	Frontier Region	6,002	5,160	4,479	2,405
101	FATA	14,188	12,538	11,618	8,192
106	Capital Outlay on Prchases by KA and GB	2,198	2,076	1,940	1,813
131	Dev. Exp of KA & GB Div	9,598	8,046	7,269	6,585
138	Dev.Exp of FATA	18,500	16,000	10,000	8,643
	Grants to AJK Government	21,000	11,000	15,000	6,796
	Grant -in-Aid to GB			8,164	
	<b>Total</b>	<b>79,143</b>	<b>62,385</b>	<b>88,429</b>	<b>58,218</b>
	Total Federal Current and Development Expenditure	<b>3,985,437</b>	<b>3,203,000</b>	<b>2,767,000</b>	<b>2,443,000</b>
	Share	1.99%	1.95%	3.20%	2.38%









Pakistan

