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Sustainable Development Goal 13: A Legislative and Policy Gap Analysis for Balochistan

13 CLIMATE ACTION



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Leadership for Environment and Development (LEAD) Pakistan



Sustainable Development Goal 13

Take urgent action to combat Climate Change and its impacts.

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The views expressed in this publication are those of the author(s)—and the respondents interviewed during the research of which this report is a product—and do not necessarily represent those of the United Nations, including UNDP, or UN Member States.”

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Acronyms

BEPA	Balochistan Environment Protection Agency
BGROB	Balochistan Government Rules of Business
CC	Climate Change
CCP	Climate Change Policy
CPEIR	Climate Public Expenditure and Institutional Review
CSO	Civil Society Organizations
DRR	Disaster Risk Reduction
EPD	Environment Protection Department
FDG	Focus Group Discussion
FGROB	Federal Government Rules of Business
GDP	Gross Domestic Product
GoB	Government of Balochistan
GoP.	Government of Pakistan
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
MDGs	Millennium Development Goals
MoCC	Ministry of Climate Change
NDC	Nationally Determined Contribution
NDMA	National Disaster Management Authority
P&DD	Planning and Development Department
PDMA	Provincial Disaster Management Authority
SDG	Sustainable Development Goals
SDGs	Sustainable Development Goals
SFDRR	Sendai Framework on Disaster Risk Reduction
UN	United Nations
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change

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Executive Summary

The geology, topography, and location of Balochistan (the largest and poorest province of Pakistan) suggest that due to climate change the area is facing a high risk of hazards that can lead to complex disaster emergencies causing widespread displacement and migrations. The climate-induced natural occurrence and associated risks are in turn being exacerbated by environmental degradation, deforestation, and soil erosion. The likelihood of devastating flash floods has sharply increased due to changes in monsoon patterns. These challenges will have a significant impact on the achievement of SDG13 in Balochistan.

Due to the cross-cutting nature of climate actions, Balochistan must take measures to devise a legal, policy and institutional framework to facilitate the implementation of SDGs at the sub-national level. Numerous climate-related laws and policies exist at federal level, however, the majority of these policies, plans and strategies are yet to be adopted and localised according to development priorities and needs of the province.

The perils of climate change are more noticeable on the lives and livelihoods of the poor of Balochistan. Rising temperatures, erratic precipitation, seasonal shifts, and sea level rise have had different impacts on the different regions of the province. Some areas are experiencing droughts through erratic and insufficient precipitation while others are frequently ravaged by floods from hill torrents in the changing climatic patterns modulated through a rise in average temperature. The impact of climate change on water-energy-food nexus has increased the insecurity for each sector, thereby multiplying the vulnerabilities of people in the province.

The study provides a target by target context and reflections about the implementation of SDG 13 in the province. These reflections are based on focus group discussions and key informant interviews of legal experts, institutional experts from the public sector, members of parliament and representatives of CSOs.

With regard to target 13.1 (strengthening resilience and adaptive capacity) key reflections included lack of district-wise data on climate induced hazards; no mention in the existing legal and policy instruments of measures which could enhance resilience and adaptive capacity in the province; and no sectoral plans for building resilience and adaptive capacity. Salient recommendations included relevant policies and laws (notably NCCP, 2012, National DRR Policy 2013, Climate Change Act 2017) to be tailored to provincial needs and circumstances, in particular, development of a comprehensive provincial climate change policy; development of a strategy to meet the SDG13 targets as well as other priority sectors which are directly affected by climate change; formulation of a Climate Action Plan identifying key activities like capacity building, research, technology transfer, education, awareness raising, and institutional strengthening; and any institutional framework for implementation of these policies, strategies and plans should take into account Balochistan's vast and diverse geographical landscape and other socio-economic local realities.

For target 13.2 (integrating climate change measures in policies, strategies and planning) key reflections included lack of sub-national policies, strategies and action plans for Balochistan; no clear mechanism for implementing projects and plans to enhance climate action in the province; and the related issue of no dedicated laws or policies to ensure the budgeting of adequate resources, whether technical or financial. Key recommendations included formulation of a provincial climate change policy supported by a Strategy and Action Plan; creation of a climate change cell to reduce fragmentation of roles and responsibilities, localization of SDG 13 targets, establishing procedures for including SDG targets in the development process; identifying priority sectors (such as agriculture, livestock, forestry and water) for climate action, and liaising with and

reporting to the federal MoCC on SDG 13 progress; establishment of a Climate Change Authority responsible for formulating and enforcing climate-relevant laws and rules forming the basis for climate action.

For target 13.3 (improving climate knowledge) key reflections were focused on lack of awareness about climate change impacts on the vulnerable population; not sufficient accent on climate change in education with research capacity in the field being very low; and the existing capacity building initiatives being thoroughly insufficient. The resulting recommendations included the establishment of a Climate Change Centre to study the impacts of climate change on different sectors of Balochistan facilitating evidence-based policy making through research as well as to undertake capacity building and skills development; climate change to be offered as a subject in primary, secondary, and tertiary level education institutes of Balochistan; ensuring greater community participation in climate change projects and programmes; initiation of legal review of all applicable laws to remove contradictions with climate action agenda; and launching of awareness campaigns which help enhance community ownership and shape political will.

With regard to the two auxiliary targets related to means of implementation (13.a and 13.b) the key reflections for 13.a (climate finance) pertain to funding from the federal government being low; in the absence of a tailored climate change policy the climate relevant expenses were skewed to certain sectors like water and were not producing the desired results. Key reflections for 13.b (capacity building) included clearer role and responsibilities of various government departments in capacity building; mechanism for ensuring effectiveness and inclusivity in this exercise has not been established; and with the provincial capacities (both human and financial) being low there was a marked need for assistance from the federal government. The salient recommendations in this regard pertained to the need for the creation of a climate change cell to increase coordination, planning, and regulation for climate action; the allocation of the climate relevant expenditure - with limited help from federal government and international donors - needed to be disbursed through a tailored legal and policy framework; and facilitation to enforce the Paris Agreement through a provincial climate change policy and by updating its rules of business.

Critical gaps – legislative, policy and institutional - in meeting the SDG 13 targets are linked to an absence of tailored climate change policy for Balochistan and legal instruments to support it. Among a host of reasons, non-optimal institutional arrangements and inadequate capabilities are major hindrances to the formation and implementation of sub-national policies focusing on climate action. The regulatory, institutional, political, and financial aspects of climate action will need to be either created or reoriented to meet the targets set out by SDG 13. This should include capacity to tap climate finance available through international sources.

While the budgetary analysis under CPEIR shows a healthy increase in climate spending in the province during the period 2011-15, especially under adaptation, it has not been through a coherent design informed by a formal policy. Balochistan will need to develop a climate change policy by tapping into the knowledge and data that exists at the local level. Establishing an effective and coherent policy space will allow subsequent strategies and actions for enhancing resilience and adaptive capacity to climate change impacts. The proposed policy needs to be supported by reliable implementation and institutional mechanisms. In view of its sub-optimal capacity, the Federal government and parliament should also support the province in establishing its policy and legal framework for climate action.

To this end, political commitment and sustained engagement of the Provincial Assembly will play a key role. Efforts are needed to raise awareness of climate change to make climate action a public good with effective uptake not only by the policymakers but political parties as well. Moreover, institutional synergies are needed to generate robust action across multiple sectors. It is proposed to set up a dedicated unit – the Climate

Change Cell - ideally housed at the provincial P&D Department, to steer the implementation of the policy and liaising with climate-relevant sectors/departments. The unit should also have a reporting role to a higher provincial Climate Change Authority. This Authority should be responsible for formulating and enforcing climate-relevant laws and rules forming the basis of legal and non-legal instruments for climate action.

In addition to these two institutional mechanisms, we also propose setting up a Climate Change Centre at a public university in the province – supported by academia and CSOs – to cater to the research and training required to meet the objectives and targets of SDG 13. This integrated approach will add to the benefits of goal-based planning and possibly contribute to the implementation of other SDGs in the province as well.

1. Introduction

Commissioned by the UNDP, this work undertakes a gap analysis of existing climate change (CC) related legislation and policies and makes recommendations on how to establish a conducive operating space for the effective implementation of the SDG13 (Climate Action) in Balochistan - the largest, yet the poorest province of Pakistan. The legislative gap analysis includes an assessment of the national and provincial legal and non-legal policy related documents to identify new legislative areas or potential amendments needed within existing legislation. This gap analysis covers assessment of legal and policy space for all five targets of SDG13. The focus is given to legislation that is directly related to the implementation of the climate actions in the province.

Sustainable Development Goals came into effect in January 2016, and aim to serve as a guide for UN policies and funding for the next 15 years. The 17 goals through 169 targets feed into all the three dimensions of sustainable development, namely environmental, social, and economic. As a lead implementing agency UNDP focuses its efforts on 'poverty alleviation, democratic governance and peacebuilding, climate change and disaster risk, and economic inequality' at different levels of governance. In order to achieve the targets, the UN favors an integrated approach bringing together partnership of governments, private sector, civil society and citizens (UN, 2015).

The SDGs have a broader focus and have a deeper outreach for reducing poverty and increasing development. SDGs gain their thrust from the momentum provided by the MDGs in developing countries. However, unlike the MDGs, SDGs are intended for action in both developed and developing countries. They are closely linked to different dimensions of poverty, health, economic welfare, education, gender equality, access to water and sanitation, energy, resilience to disasters and shocks, access to justice, environment and climate change (United Nations, 2015) and cover a lot more ground as compared to MDGs. The most important aspect of the SDGs is the mechanism to facilitate implementation; mobilization of financial and technological resources; and skill development. SDGs recognize climate action as an essential component to sustainable development and has a dedicated goal to combat impacts of climate change.

With wider scope and incorporated lessons from MDGs, SDGs build on the achievements of its predecessor. Pakistan had struggled to catch up with the momentum of the MDGs and missed nearly two-thirds of its targets. Pakistan's limited success of MDGs can be attributed to a number of factors including lack of policy coherence, robust institutional framework, resource mobilization, political will and ownership, coordination mechanisms, integrated efforts from non-state actors; and reporting inconsistencies (Ahmad, 2015). Climate change is going to be the most important environmental driver that threatens development efforts across Pakistan and elsewhere. The risks associated with it call for a broad spectrum of actions and strategies across several SDGs at the national, sub-national and local levels, delivered in a coherent and integrated manner. The SDG 13 is one of the unique goals among the battery of SDGs as it recognises effective implementation of two other related processes: the Paris Agreement under the UNFCCC and the Sendai Framework on Disaster Risk Reduction (SFDRR).

The 195 parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed on a universal climate change treaty, or Paris Agreement, in December 2015, in order to substantially reduce GHG emissions and undertake enhanced actions on climate change adaptation. In the run up to the Paris Agreement the countries submitted their national action plans or Intended Nationally Determined Contributions (INDCs). These INDCs are now part of the global agreement on climate change and serve as the foundation for national climate efforts till 2030 (United Nations Framework Convention on Climate Change 2015). Likewise, the UN

member states agreed in March 2015 at Sendai Japan on seven targets to minimise the effect of disasters and increase the resilience of people, infrastructure and economies.

The National Climate Change Policy (NCCP) 2012 provides the starting point for the implementation of SDG 13 in Pakistan. The Government of Pakistan had introduced Climate Change Bill 2016, which after the endorsement of the federal cabinet, has now been approved by both the houses of Parliament as well to be enacted as the Climate Change Act 2017. At the provincial level, Khyber Pakhtunkhwa, Sindh, and Punjab seem to have considered 'climate change' as a devolved subject matter post 18th constitutional amendment of 2010. All three provinces are in process of developing their own climate change policies and implementation plans at the sub-national level (This is open knowledge. LEAD knows it particularly well for it has been involved with all three provinces in drafting their Climate Change policies.) As part of the Paris Agreement, Pakistan also submitted its INDC and the modified NDC to the UNFCCC which outlined national challenges, priorities, commitments and needs to deliver effective climate actions till 2030.

The climate risks and vulnerability vary at provincial and local levels. The national planning and strategy documents recognise the need for local strategies and actions. (National Climate Change Policy: Framework for Implementation; 2013) However, such arrangements are still in an embryonic phase. This is a cause of worry for Balochistan is the largest province and is increasingly becoming a hotspot for major climate-related disasters.

Addressing the complex climate impacts in Balochistan requires a new set of laws, policies and a robust system to monitor progress. The availability of data is going to be a critical challenge in meeting SDG 13. Currently, disaster data and information are not systematically brought together to monitor hazard patterns, occurrence, vulnerability, magnitude and severity. (IUCN, 2011. Climate Change and Coastal Districts of Balochistan-Situation Analysis , Implications and Recommendations. Also UNDP, 2015. Drought Risk Assessment in the Province of Balochistan, Pakistan.) These gaps limit the possibility of assessing the relative impact of disasters, especially those induced by climate change. In sum, the SDGs provide an opportunity for a new set of legislation, policies and data infrastructure. In light of this, Balochistan's goal must be to formulate more province specific policies or laws that are in line with the National Climate Change Policy or the new Climate Change Act and ensure that climate action is mainstreamed in development planning, especially in the economically and socially vulnerable sectors of the province.

Approach and Purpose of the Report

The study followed a qualitative, multi-method assessment for finding legislative and policy gaps on SDG 13 and its implementation in Balochistan (for detailed methodology see annex 1). For the purpose of this report the existing framework, at the national and sub-national levels, of climate change related policies, procedures, legislation, regulatory and financial mechanisms, was assessed. Furthermore, information about province specific legislation and policies, including the Rules of Business was compiled; and assessment of uptake by the assembly members for resource allocation and policy compliance was carried out. This analysis, in particular, focused on processes where the provincial assembly members play a key role, specifically relating to climate finance and budget oversight.

The primary focus of the study, however, was to analyze the corpus of legislation specific to climate change. Through the examination of laws and policies some fundamental gaps were identified which served as guiding themes for developing the questionnaires. As qualitative research method tools, these questionnaires were used to conduct Focus Group Discussions (FGDs), and Key Informant Interviews (KIIs). These questionnaires, administered during FGDs and KIIs, were developed around the indicators proposed by the Inter-Agency Expert Group on SDGs (IAEG-SDGs). The study makes recommendations to help strengthen legislative and

policy frameworks relating to climate change adaptation and mitigation of SDG 13 in Balochistan, improve budget oversights and address implementation challenges.

The sampling of the study participants included representatives from both public and non-governmental sectors. The non-governmental sector representatives included civil society organisations, data users and producers, and legal experts. Public sector representatives included members of parliament and institutional experts. The category of parliamentarians included young members, SDG Task Force, and non-SDG Task Force members (see annex 1). Institutional experts included senior bureaucrats (e.g. Director General, PDMA) from key departments. The FGDs highlighted challenges to achieving the targets set out by SDG 13. The KIIs added more depth to the data collected for this study. These interviews were vital to gaining a deeper understanding of the interviewees' perceptions and the context of responses in relation to the implementation or non-existence of climate change related laws and policies. All interviews and FGDs were voice-recorded and transcribed. The data analysis was guided by content analysis, a qualitative technique used to determine the presence of climate action related concepts in texts.

Section 2 of the report highlights the intrinsic relationship between climate change and SDGs and how achievements on one impact the success of other. Section 3 provides an overview of climate change challenges, risks, vulnerabilities and impacts in Pakistan and Balochistan. Section 4 undertakes an overview of the legislative portfolio of Pakistan and Balochistan with regard to climate change. Section 5 discusses the evolution of Pakistan's legal, policy and institutional response to climate change to set the context for the legislative gaps identified in Section 6. Budgetary analysis of climate relevant spending in Balochistan is covered under Section 7, followed by the conclusions in Section 8.

2. Climate Change and SDGs

Climate change is a development challenge with the potential to undermine the development achievements of a country and threaten future pathways to poverty reduction, health care, economic prosperity, sustainability of the planet and ecosystems, and availability of water. The poorest and most vulnerable people are likely to be the worst affected unless we undertake development strategies that have the potential to mitigate and adapt to the impacts of climate change.

Climate change heightens the complexity of poverty eradication efforts and the path to a sustainable future. The poor people, especially those residing in developing countries, are exposed and vulnerable to different types of climate-related shocks - natural disasters that destroy lives and livelihoods. Climate change has also been associated with heat waves; floods or droughts; crop failure from reduced rainfall and water related health emergencies. Achieving SDGs and addressing climate change are inter-related processes and constitute major steps towards economic, social, and environmental sustainability. These processes cannot be considered in isolation as they are intrinsically linked and must be implemented through an integrated strategy (Stephane et al. 2015).

Both SDGs and the Paris Agreement recognise the relationship between climate actions and several other SDGs. In addition to the one exclusive goal on climate change (SDG13), about 50 of the 169 targets address the need to tackle climate change and avert its negative impacts, particularly on poverty, food, water, energy, and economic development. The importance of climate change for human well-being is naturally recognised by all parties to the UNFCCC under the Paris Agreement. This new climate deal demands greater focus on mitigation efforts to avert deleterious effects of climate change and on adaptation for climate resilient development.

The objective of SDG 13 - Climate Action - is to reduce GHG emissions and promote renewable energy thereby combating some of the causes of climate change. It talks about taking urgent action to combat climate change and its impacts. It includes five indicators and five targets. The targets aim at strengthening resilience and adaptive capacity to climate-related hazards and natural disasters; integrating climate change measures into national policies, strategies and planning; improving education, awareness-raising, human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning; mobilizing climate funds; increasing capacity for effective climate-related planning and management while adopting an inclusive approach. The SDG 13 Climate Action is the only goal which outsources its responsibility to other frameworks such as the UNFCCC and the Sendai Framework for DRR (see table 2-1).

The SDG 13 on climate change is also linked with around 50 targets directly and indirectly. The climate change goal has a multiplier potential as the successful achievement of SDG 13 targets will also lead to delivery of several targets on poverty reduction, access to water, food security and resilience. The integrated nature of climate change goal can serve as a useful tool to undertake climate actions at the provincial level and promoting local actions (UN 2016).

Table 1 SDG 13 Climate Action Targets and Indicators (UN 2016)

Target	Indicator
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.	13.1.1* Number of deaths, missing people, injured, relocated or evacuated due to disasters per 100,000 people.

13.2 Integrate climate change measures into national policies, strategies and planning.	13.2.1* Number of countries that have formally communicated the establishment of integrated low-carbon, climate-resilient, disaster risk reduction development strategies (e.g. a national adaptation plan process, national policies and measures to promote the transition to environmentally-friendly substances and technologies).
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	13.3.1* Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula.
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.	13. a.1 Mobilised amount of US\$ per year starting in 2020 accountable towards the US\$ 100 billion commitment.
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in the least developed countries and small island developing States, including focusing on women, youth and local and marginalised communities.	13.b.1* Number of Least Developed Countries (LDCs) and Small Island Developing States (SIDS) that are receiving specialised support for mechanisms for raising capacities for effective climate change related planning and management, including focusing on women, youth, local and marginalised communities.

3. Climate Change Impacts

Country Profile

Carbon is an emblem of the industrial revolution and the release of its derivatives are known culprits for inducing climate change. Climatic changes cause temperature variations, seasonal shifts, sea level rise, and changes in rainfall patterns. These changes can increase the likelihood of climate induced disasters such as floods, droughts, hurricanes, and tornadoes (IPCC 2014).

The effects of climate change on Pakistan's society have been amongst the most significantly observed anywhere in the world. The Global Climate Risk Index (CRI) 2017, issued during the United Nations (UN) climate summit in Poland, ranks Pakistan 7th amongst the countries in the bottom 10 of the long term climate risk index (based on natural catastrophes in the last twenty years, from 1996 to 2015 (Kreft et al. 2017).

During this period (1996-2015), Pakistan has suffered from incessant climate induced disasters, including mega floods in 2010 and 2011, and major droughts in 1999 and 2002, which wreaked havoc on the lives and livelihoods of the affected people. Many studies conclude that "the observed frequency, intensity, and duration of some extreme weather events have been increasing as the climate system has warmed."¹ Although climate change attribution to these extreme weather events - cyclones, floods and droughts - is still somewhat uncertain and is a subject of intense scientific research, but IPCC, on the basis of statistical analysis confirms that temperature rise is likely to trigger more of these events. These changes – temperature rise and increasing frequency, intensity and duration of extreme events - will have massive impacts on water, food and energy security (IPCC 2014).

Pakistan is likely to experience an overall temperature increase which is expected to exacerbate water scarcity, as climate variability will add additional stresses on water availability and precipitation patterns. These in turn will affect food and energy security in the country; for water, apart from being the mainstay of agriculture is also one of the main resources of power generation (hydro-power). Extreme impacts of climate variability can lead to floods, droughts, and storms and sea level rise in coastal areas. Additionally, the health sector will face new challenges from the outbreak of heat related extreme events, like heat waves. These negative effects will further exacerbate the huge challenges of development that Pakistan is already facing, as it is less able to adapt to the climatic changes and the proportion of its vulnerable population is high (Ahmad 2015).

Balochistan's Sub-National Variations

Balochistan, is spread over an area of 347,190 square kilometers and constitutes nearly 45% of Pakistan's total area. While being the largest province it has the lowest population density. Geographically, it can be divided into four zones comprising of the upper high lands, lower high lands, plains, and deserts. Each zone is characterized by a distinct climate, summarized in Table 3-1 below. The province experiences low average annual rainfall which decreases from northern areas to southern areas (Government of Balochistan 2016).

1. Committee on Extreme Weather Events and Climate Change Attribution et al., 2016: p. 2

Table 2 Climatic features of Baluchistan's Geographic zones

Geographic Zone	Climate
Upper high lands	<ul style="list-style-type: none"> • Warm summers • Very cold winters
Lower high lands	<ul style="list-style-type: none"> • Summers are hot and dry; extremely cold in the northern districts; mild conditions closer to the Makran coast
Plains	<ul style="list-style-type: none"> • Extremely hot summers • Mild winters
Deserts	<ul style="list-style-type: none"> • Hot and arid

Temperature changes

Balochistan is likely to experience an increase in surface temperatures as a result of global warming. This is likely to cause seasonal shifts. These seasonal shifts are expected to disturb the parameters which define normal weather conditions in the province. With summers set to increase in duration and intensity, shorter cold winters are likely to become the norm (IPCC 2014) (IUCN 2011).

Precipitation changes

Climate change has altered the hydrological cycle in the province. Balochistan is now experiencing erratic and sparser rainfall. Many places in the province used to receive snowfall, the frequency and intensity of which has reduced over the years, in some places, quite drastically. This is having harmful impacts on the quality and quantity of water resources in the province. Droughts are a result of reduced water availability for human, plant, and animal consumption. According to the IPCC, temperature changes of 2-3 degrees centigrade will affect parts of South Asia, including Pakistan. These temperature changes will reduce average precipitation thereby impacting water availability. As a result, some districts of the province will experience droughts while most others will experience drought-like conditions. A few areas can also experience floods (IPCC 2014) (UNDP 2015).

"Killa Saifullah, bordering district of Baluchistan, the karez have dried up as the rainfall in the district has reduced. Compared to a few years back the rainfall now is sparse and does not help in ground water recharge" –Irfan Bakhtiari, Independent Consultant.

Sea level changes

Global warming will increase sea surface temperatures. The changes, resulting from increased levels of carbon dioxide in the atmosphere, disrupts hydrological cycles as oceans acidify giving rise to more frequent and intense storm surges. Coastal areas are sensitive to sea level rise, sea-based natural hazards (cyclones and storms), warming of waters, ocean acidification, and changes in precipitation (IPCC 2014). Balochistan, which contains about 70% of Pakistan's coastline is likely to experience these impacts of climate change (IUCN 2011), especially in its coastal zones.

Water resources in the province have been significantly impacted by climatic changes. Water shortages have become common in both urban and rural areas. The quality of water has also deteriorated in the province. Karez² system in the province has nearly dried up owing to poor ground water policies exacerbated by climate change impacts. Temperature increase accelerates the drying up of soil degrading its fertility and water content. This adversely impacts horticulture and crop production in the province threatening food security. Temperature increases have also increased energy requirements as households rely on electrical appliances to ward off heat during the elongated and intense summers. Seasonal shifts have made crop cultivation problematic as uneducated farmers struggle to keep up. Rain-fed agriculture is the dominant form of agriculture practiced in Baluchistan, erratic precipitation makes crop cultivation difficult and also threatens crop yield and quality (IUCN 2011).

A year into the implementation of SDGs in Pakistan, Balochistan still lacks the legal and policy instruments required to link itself to the global paradigm of the SDGs. While the desired denouement of the 18th amendment should be legal and policy reform in the province to facilitate adaptation, mitigation, and DRR; it has not yet happened. Balochistan's goal must be to formulate more province specific policies and laws that are in line with the National Climate Change Policy, and the upcoming Climate Change Act; to ensure that climate action is mainstreamed in development planning, especially for the economically and socially vulnerable segments of the society and the sectors on which their livelihoods are based.

"Pashtun tribal belt was famous for its fruits and thick tree cover which supplies these fruits. In the last 5 to 6 years, owing to temperature variations, erratic rainfall, and reduction in water availability, the tree cover had reduced drastically. From thick to sparse and barren has taken a very short time span. This again has had deleterious impacts on the provinces exports. Balochistan has gone from self-sufficiency to dependency on other actors".

"Ground water has receded drastically in the last 5-6 years. Despite breaking 'hard rock' ground water extraction has become a futile exercise in some areas"

Kaleem Ullah Niazi, Environmental Impact Assessment Consultant

4. Climate Change Legislative Portfolio: Pakistan and Balochistan

Before we analyze the legislative portfolio of Pakistan and Balochistan pertaining to climate change and the institutional set up that underpins it, it will be in order to undertake an overview of the portfolio itself.

4.1 The Constitution and Climate Change

The Constitution of the Islamic Republic of Pakistan, 1973 (the "Constitution") limits the (i) executive and (ii) legislative jurisdiction of the Federation and of the Parliament and the Provincial Assemblies, respectively:

Limits of Executive Authority

Article 97 of the Constitution provides, "(s)ubject to the Constitution, the executive authority of the Federation shall extend to the matters in respect to which Majlis-e-Shura (Parliament) has powers to make laws, including of rights, authority and jurisdiction in and in relation to areas outside Pakistan". The proviso to Article 97, however, provides that the executive authority of the Federation "shall not, save as expressly provided in the Constitution, or in any law made by Majlis-e-Shura (Parliament), extend in any province to a matter with respect to which the Provincial Assembly has also power to make laws".

Article 137 of the Constitution provides, "(s)ubject to the Constitution, the executive authority of a Province shall extend to the matters with respect to which the Provincial Assembly has power to make laws" (emphasis added). The proviso to Article 137, however, provides "that, in any matter with respect to which both Majlis-e-Shura (Parliament) and the Provincial Assembly of a Province have powers to make laws, the executive authority of the Province shall be subject to, and limited by, the executive authority expressly conferred by the Constitution or by law made by Majlis-e-Shura (Parliament) upon the Federal Government or authorities thereof."

i. Limits of Legislative Authority

Article 141 of the Constitution, as amended by the 18th Amendment, provides that Parliament may make laws for the whole or part of Pakistan, and a province may make laws for the Province or any part thereof. Article 142 sets out the subject matter of Federal and Provincial laws thus:

Subject to the Constitution-

- a) Majlis-e-Shoora (Parliament) shall have exclusive power to make laws with respect to any matter in the Federal Legislative List;
- b) Majlis-e-Shoora (Parliament) and a Provincial Assembly shall have power to make laws with respect to criminal law, criminal procedure and evidence.
- c) Subject to paragraph (b), a Provincial Assembly shall, and Majlis-e-Shoora (Parliament) shall not, have power to make laws with respect to any matter not enumerated in the Federal Legislative List.
- d) Majlis-e-Shoora (Parliament) shall have exclusive power to make laws with respect to all matters pertaining to such areas in the Federation as are not included in any Province.

The Fourth Schedule of the Constitution contains the current Federal Legislative List.

2. The ancient Karez system is comprised of a series of wells and linking underground channels that uses gravity to bring ground water to the surface, usually far from the source.

It is important to highlight that the Federal Legislative list does not contain the subject of climate change. Therefore, a bare reading of the Constitution suggests that the Federation does not have executive authority over the subject of climate change and that the National Assembly does not have the jurisdiction to legislate upon climate change. As the Constitution stands, the subject of climate change is of provincial legislative competence alone. However, it is also pointed out that under Article 144 of the Constitution, a resolution may be passed by one or more Provincial Assemblies requesting Parliament to make a law on a subject otherwise of a provincial nature.

4.2 The Federal Government Rules of Business (FGROB)

The Federal Government Rules of Business (as amended up to 18th December, 2015, "FGROB, 2015") are issued under powers conferred by Articles 90 and 99 of the Constitution. These rules are made by the Parliament that set out how the business of the Federal Government can be undertaken. According to Rule 3, according to which business is allocated, the Federal Secretariat is to be comprised of Ministries and Divisions.

Schedule II of the FGROB 2015 outlines the mandate of the Climate Change Division, which is as follows:

Climate Change Division (climate change ministry)

1. National Disaster Management Authority
2. Pakistan Environmental Protection Council
3. Pakistan Environmental Protection Agency
4. Pakistan Environmental Planning and Architectural Consultants Limited (PEPAC)
5. Global Environmental Impact Study Centre, Islamabad
6. National policy, plans, strategies and programmes with regard to disaster management including environmental protection, preservation, pollution, ecology, forestry, wildlife, biodiversity, climate change and desertification.
7. Coordination, monitoring and implementation of environmental agreements with other countries, international agencies and forums.
(Emphasis added)

The National Disaster Management Authority (NDMA) is the lead agency at the Climate Change Division (now Ministry of Climate Change). Additionally, the Pakistan Environment Protection Council is the apex environmental body of the Federal Government responsible for, amongst other things, approving National Environment Quality Standards and environment policy for the territorial limits of its post-18th Amendment jurisdiction. The Pakistan Environment Protection Agency is the environment regulator for the territorial limits of the Islamabad Capital Territory.

The role of the Division is to monitor the performance of these agencies, and formulate national policies and plans with regard to climate change. It responds to these responsibilities by dividing itself into five wings, including an Environment Wing, headed by the Director-General, Environment.

It is critical to point out that despite the fact that the subject matter of climate change does not appear on the Federal Legislative List, the FGROB incorporates Climate Change as a Division.

With regards to the Federal Government's rules on international agreements rule 15(1)(c) of Part C of the FGROB 2015 states that "(n)o order shall be issued without the approval of the Prime Minister in ... cases where it is proposed the Federal Government undertake the implementation of an international agreement relating to a subject in the provincial field." Rule 49(3) of the FGROB 2015 reinforces this rule by stating that "(t)he

implementation of an international agreement in the Provincial field shall normally be the responsibility of the Provincial Government unless in any case specific orders of the Prime Minister are obtained by the Division concerned in accordance with 15(1)(c)." This is significant since it is a clear indicator of the autonomy of Balochistan, and other provinces, in implementing international agreements, and treaties related to climate change.

4.3 Major National Laws

4.3.1 Pakistan Climate Change Bill, 2016³

The MOCC has introduced a new umbrella law for climate change in December, 2016 and approved by the National Assembly (Lower house of the parliament). The bill aims to reduce the impacts of climate change, and establishes a council, authority, and fund. In order to ensure climate action, the act gives the council and authority the power to establish its rules and regulations. It also establishes a tribunal to settle any disputes which may arise. Once enacted the bill will be applicable to the whole of Pakistan. However, it remains to be seen how this would play out with the fact that 'climate change' is absent from the federal legislative list.

4.3.2 Pakistan Environmental Protection Act, 1997

Prior to the 18th Amendment, the Pakistan Environmental Protection Act ("PEPA 1997"), was the over-arching legislative instrument which empowered the government to frame regulations for the protection of the environment. PEPA 1997 replaced the earlier Pakistan Environmental Protection Ordinance, 1983 and incorporated several soft law principles adopted at Stockholm, Rio, and Johannesburg including the prevention principle, precautionary principle, and the principle of restoration/restitution. Under PEPA 1997, the Pakistan Environmental Protection Agency was created which is responsible for the implementation of all environmental policies created by PEPC, at the Federal level. Provincial EPAs were created to implement policies at the provincial level. PEPA 1997 also established a Provincial Sustainable Development Fund that allowed for the protection and conservation of renewable resources; established Environmental Tribunals, allowed for the appointment of Environmental Magistrates, and for conducting Initial Environmental Examinations and Environmental Impact Assessments.

Section 31 of PEPA 1997 give the Federal Government the power to make rules for implementing the provisions of those international environmental agreements listed in its Schedule.

The following international environmental agreements are specified in the Schedule to PEPA 1997:

1. International Plant Protection Convention, Rome, 1951.
2. Plant Protection Agreement for the SouthEast Asia and Pacific Region (as amended), Rome, 1956.
3. Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in SouthWest Asia (as amended), Rome, 1963.
4. Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Ramsar, 1971 and its amending Protocol, Paris, 1982.
5. Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972.
6. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973.

3. It has now been approved by both houses of the Parliament to become the Pakistan Climate Change Act, 2017

7. Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 1979.
8. Convention on the Law of the Sea, Montego Bay, 1982.
9. Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985.
10. Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments thereto.
11. Agreement on the Network of Aquaculture Centers in Asia and the Pacific, Bangkok, 1988.
12. Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal, Basel, 1989.
13. Convention on Biological Diversity, Rio De Janiero, 1992.
14. United Nations Framework Convention on Climate Change, Rio De Janiero, 1992.
(Emphasis added)

In pursuance of Article 12 of the UNFCCC, Pakistan was obliged to prepare and submit a National Communication containing a national inventory of greenhouse gases and detailing the general description of steps taken to implement the Convention. In 2003, the then Ministry of Environment prepared and published Pakistan's Initial National Communication on Climate Change (the "Initial National Communication"). The Initial National Communication attempted to provide a detailed analysis of the issues which were challenging Pakistani climate change planners. It detailed climate change impacts in key sectors, including impact on water resources and agriculture. Using climate change scenarios consistent with scenarios generated and used by UN agencies, the Initial National Communication described the impacts climate change would have on water resources, agriculture, forestry and land-use change, coastal zones, livestock, biodiversity, important ecosystems, socioeconomics and extreme events.

4.4 National Policies

4.4.1 National Climate Change Policy, 2012

The National Climate Change Policy ("NCCP, 2012") was adopted in 2012. It predominantly advocates a climate change adaptation narrative – though mitigation is also addressed - and its goal is 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.

The NCCP, 2012 identifies vulnerabilities in the sectors of water resources, agriculture and livestock, forestry, biodiversity and other vulnerable ecosystems including coastal areas and arid areas. It also puts forward appropriate policy measures relating to disaster preparedness, capacity building, institutional strengthening, technology transfer and international cooperation. Furthermore, it categorizes climate change mitigation methods to be adopted along with policy implementation mechanisms. It is an aspirational document which also addresses the issue of gender as a socio-economic measure within climate change adaptation.

Unfortunately, the NCCP 2012 was approved at the time of the implementation of the devolution envisaged by the 18th Amendment, and this impacted its weight and significance as a policy document, as well as on environment regulation by the Federal Government as a whole. However, during the last couple of years National Climate Change Policy Implementation Committees have been formed in the provinces.

4.4.2 Framework for Implementation of Climate Change Policy (2013)

In 2013, Pakistan, with the support of the United Nations Development Programme (UNDP) launched its framework for implementing the national policy on climate change, as a sequential document following up on

the NCCP, 2012. The framework detailed how it planned to tackle the challenges posed by global warming, by mitigating its risks and adapting various key sectors of the country's economy to cope with its consequences. It recommends around 120 steps that the country could take to slow down the impact of global warming, as well as adopt mitigation and adaptation actions in the sectors of energy, transport, water, forestry, urban planning and agriculture. The National Climate Change Policy takes into account risks and vulnerabilities of various development sectors with specific emphasis on water, food, and energy.

Similar to the fate meted out to the National Climate Change Policy of 2012, the framework of implementation has also not been institutionally implemented by the provincial assemblies.

4.4.3 National Sustainable Development Strategy (2012)

A 2012 document titled 'National Sustainable Development Strategy - Pakistan's Pathway to a Sustainable and Resilient Future' was developed by the UNDP in collaboration with the Government with the sole objective of sustainable growth. Climate change is significantly connected with sustainable development and therefore strong future planning is necessary for survival for the generations to follow. The Strategy recognizes that though Pakistan is a small contributor to the issue of climate change, adding a mere 0.8% to global emissions, it is identified as one of its worst casualties – a fact which is reflected in the various indexes which monitor climate change including the Maple Croft Index, Columbia University Vulnerability Index, and German Watch Index.

The most serious impacts of this are in the increase in both the frequency and severity of floods, droughts, cyclones and heat waves which cause severe damage not only to the lives and property of the people but also to the economy of the country as a whole. Recognizing this serious environmental catastrophe, the National Disaster Management Authority was created to form a solid foundation for Disaster Risk Reduction (DRR). Pakistan needs significant finances to be able to manage and mitigate the impact of climate change – e.g. mitigation costs for carbon emissions are predicted to be between \$8 billion to \$17 billion to 2050. Therefore, it is imperative that Pakistan's moves to the generation of renewable clean energy and discontinues its dependence on carbon fuel. The carbon value of forests, which are being mercilessly destroyed, need to be financially identified and quantified, for both the present and the future, and preserved as a valuable carbon asset.

Ostensibly, the Government of Pakistan has made institutional changes to provide for protection from climate change, e.g. the Ministry of Climate Change has been created with the mandate to address the national issue of climate change in consultation with other stakeholders. The Strategy proposes various approaches necessary for the successful implementation of a climate change portfolio, e.g. bringing the issue of climate change into the mainstream national discourse; screening all new projects for climate change; measures for the guarantee of water, food and energy securities; introduced climate proofing in the infrastructure of the country; work with the international community to address this global problem, etc.

4.4.4 National Environment Policy, 2005

The National Environment Policy of 2005 enhanced the uptake of the implementation of the Multilateral Environmental Agreement, especially Convention on Biological Diversity, nationally. The policy proposed measures which meet objectives of the CBD and the Pakistan National Conservation Strategy 1992. It tries to promote conservation and an equitable use of natural resources. In the wake of the 18th amendment wherein the subject of environment has been devolved to the provinces, the Policy has lost its importance as an implementation framework for the provinces.

4.4.5. National Forest Policy, 2016

The GoP has approved a new National Forest Policy in December, 2016. The policy guides federal and provincial agencies to ensure conservation and sustainable management of forests and ecosystems dependent on them. It promotes an equitable and sustainable use of forest resources.

4.4.6 National Rangeland Policy, 2010

A large area of the country is covered by rangelands which play an important role in the livelihoods of the rural poor. Rangelands provide products and services which are a source of income for people in rural areas, they also contribute to ecological stability. The goal of the policy is to restore degraded rangelands and to enhance productivity through effective environmental management and regulatory functions.

4.4.7 National Disaster Risk Reduction Policy, 2013

Recognizing the critical role of climate induced disasters, the national DRR policy stresses upon building response capacities at national, provincial and local levels to cope with the climate change impacts and climate sensitive development planning. It also recognizes the role of provincial, district and municipal governments, together with civil society groups, to promote and support risk-reduction behavior amongst vulnerable communities and taking disaster risk-reduction measures in collaboration with the federal government.

4.4.8 National Conservation Strategy (NCS, 1993-98)

The National Conservation Strategy (NCS, 1993-98) provided a broad framework for addressing national environmental concerns through three main objectives: conservation of natural resources, promotion of sustainable development and improved efficiency in the management and use of available resources. Coming at an opportune time, it was a "call for action" to central and provincial governments, businesses, nongovernmental organizations (NGOs), local communities, and Pakistani citizens. The NCS recommended 14 priority action areas ranging from soil management to the preservation of cultural heritage.

4.4.9 Biodiversity Action Plan for Pakistan, 2000

In order to meet the obligations under Convention on Biological Diversity a national action plan was developed in 2000. The actions proposed by the plan suggested institutional reforms & strengthening, greater collaboration between government departments, and institutional arrangements for effective implementations. Through its 25 objectives, 13 components, and 76 priority actions the plan helped pilot national efforts towards implementation of the agreement.

4.4.10 Pakistan's Vision 2025

Pakistan Vision 2025 adopts a people-centric, and inclusive approach to improving governance, regional linkages, and private sector involvement in gearing Pakistan towards sustainability and viable growth. Key 'pillars' of the vision focus on the water-energy-food nexus, improving infrastructure, institutional reform, technology transfer, export promotion, and increasing the role of the public and private sectors.

4.4.11 Guidelines for sensitive and critical areas, 1997

These guidelines identify protected areas in Pakistan and provides detailed guidance on the appropriate

approaches that need to be adopted. The protected areas include wildlife reserves, forests, and cultural heritage sites. It presents the requirements for the consideration of sensitive and critical areas during environmental assessments, as well as a list of nationally protected natural and cultural heritage.

4.4.12 Forest Act, 1927

The Forest Act (1927) authorizes Provincial Forest Departments to establish and protect forest reserves. For forest reserves, it prohibits the (i) lighting of fires, (ii) removal of forest produce and (iii) any damage to the forest. The Khost sub-basin area – located in Balochistan - is the most sensitive forest reserve in the Project and is home to the second largest juniper (*Juniperus excelsa*) forest in the world.

4.5: Balochistan Climate Change Legislative Portfolio

The Pakistan Environmental Protection Act, 1997 ("PEPA 1997", discussed earlier) was passed by the National Assembly as, at the time, the subjects of "Environmental pollution and ecology" were borne on the erstwhile Concurrent Legislative List of the Constitution of the Islamic Republic of Pakistan, 1973 (the "Constitution"). PEPA 1997 applies to the whole of Pakistan, including Balochistan.

With the passing of the Constitution (Eighteenth Amendment) Act, 2010 (the "18th Amendment"), the Concurrent Legislative List of the Constitution was abolished. Article 270AA (6) provides as under:

"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."

Thus PEPA 1997 continued to remain in force in Balochistan after the 18th Amendment. However, the Balochistan Assembly passed the Balochistan Environment Protection Act, 2012 ("BEPA 2012") on 24 December 2012. Section 42 of BEPA 2012 repealed PEPA 1997. By operation of Article 270AA (6) of the Constitution, PEPA 1997 is no longer valid law Balochistan in and BEPA 2012 is now the environmental law of the province of Balochistan.

4.5.1: Balochistan Environment Protection Act, 2012

The Balochistan Environment Protection Act, 2012 ("BEPA, 2012) was enacted to regulate and effectively address environmental issues that were specific to the province of Balochistan. The preamble of the Act states that the legislation will "provide for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution, promotion of sustainable development". Whilst the legislation adopted all prior IEE/EIA requirements, it also introduced new sections such as environmental approvals for mining, quarrying and crushing, setting up cellular towers, and specific construction-related measures. The new legislation introduced 15 (fifteen) new region-specific definitions such as "Balochistan coastline or coastal zones" and "historic waters." (Rafay Alam, Environmental Lawyer and Legal Consultant for this Study)

Structurally, BEPA, 2012 has more or less retained the administrative structure transplanted from the federal legislation. It establishes a Balochistan Environmental Protection Council delegated with supervising the

enforcement of the legislation and providing guidelines. The Balochistan Environmental Protection Agency is then the body responsible for the implementation of the national environmental policies approved by the Council. It has a very vast mandate listed in Section 6 of the Act. Interestingly, under BEPA, 2012 the central Balochistan Environmental Protection Agency also has the power to establish regional or district environmental agencies. BEPA, 2012 specifically saves the Regulations passed under the 1972 law of PEPA.

Multilateral Environmental Agreements are discussed in section 12 of the legislation. According to BEPA, 2012, "the obligations of the International Conventions, Treaties and Protocols shall be observed as before devolution of the subject of Environment to the Province on Environment or climate change." If the Provincial government is to engage in international, bilateral cooperation, there is a requirement for the matter to proceed with consultation with the concerned Federal Ministries. The Act further goes on to say that the Government of Balochistan / Environmental Protection Agency "shall extend support to those obligation of the International Conventions, Treaties and Protocols" where adequate assistance is provided by the Federal Government.

Section 39 of BEPA 2012 confers onto the Government of Balochistan the power, inter alia, to make rules for implementing the provisions of the international environmental agreements specified in the Schedule thereto. Section 40 of BEPA allows the Government of Balochistan to amend the Schedule to include or omit any entries therein. At present, there are thirty (30) international environmental agreements listed in the Schedule to BEPA 2012, including the United Nations Framework Convention on Climate Change ("UNFCCC").

BEPA 2012 gives the Government of Balochistan the power to make rules to implement the provisions of the UNFCCC and other international environmental agreements that have climate-related components. This power to make rules confers legal validity – and obligation – onto the Government of Balochistan to comply with the provisions of the international environmental agreements listed in the Schedule to BEPA.

4.5.2 Balochistan Government Rules of Business (BGROB)

Article 139(3) of the Constitution empowers provincial governments to make rules for the allocation and transaction of their business. Accordingly, Balochistan has issued the Balochistan Government Rules of Business 2012 ("BGROB 2012"), which establishes a provincial government Secretariat and distributes the business of government, under Rule 3(4), amongst various Departments as set out in Schedule I thereto.

A review of the BGROB 2012 reveals only one mention of the phrase "climate change" in the responsibilities of the Forest and Wildlife Department as follows:

3. Effectively contribute in the Carbon Sink, Combat Climate Change and Reduction in the Global Warming (Emphasis added)

The BGROB 2012 does establish an Environment, Sports and Youth Department. However, climate change is not a responsibility assigned to this Department. Under the BGROB 2012 the following responsibilities are listed under the heading "Environment Sector" of the Department:

1. Provincial Policy, plans and programmes of environmental planning, pollution and ecology;
2. Environmental Protection of marine ecosystem and coastal area;
3. Framing and execution of environmental laws/requirements in all public and private sector development activities/schemes;
4. Protection of natural pure water sources;
5. Regulating the Environmental Quality Standards and Environmental impact assessment in respect of

- air, water, and, municipal solid wastes and hospital wastes and mining activities in the province; and
6. To deal with the matters regarding NGOs working for improvement of environment.

4.5.3 Balochistan Wildlife Protection, Preservation, Conservation and Management Act, 2014

This legislation is guided primarily by the principle of ensuring the protection, preservation, promotion, conservation, management and sustainable development of wild animals in recognition of their position as key components of biological diversity with social, cultural, economic and ecological significance for the present and future generations. In recognizing various levels of protected wildlife areas, it domesticates the provisions of the international conventions and treaties to which Pakistan is a signatory. It further encourages the active participation of local communities in the protection of wildlife resources in the Province. Community participation is further encouraged through economic incentives and benefit sharing. The Act embraces the principle of co-management of protected areas and the promotion of livelihood activities in protected areas.

4.5.4 Balochistan Conservation Strategy, 2000

The Balochistan Conservation Strategy (BCS) was prepared by the government of Balochistan with the technical assistance of IUCN. Drafted through discussions and consultations with relevant stakeholders it provided a framework for implementation from 2000 to 2010. According to the building blocks of the strategy, sustainable use is promoted for natural resources such as land, fresh water, biodiversity, coastal areas, atmosphere, and minerals. The strategy also emphasizes sustainable industrial development, energy, urban environment, poverty reduction, and protection of cultural heritage. The supporting part of the strategy is concerned with how it is to be implemented, resource mobilization, and progress monitoring.

4.5.5 Canal and Drainage Ordinance, 1980 (amended in 2000 and 2006)

The Balochistan Canal and Drainage Ordinance, entitles the Provincial government to use and control, for public purposes, water of all rivers and streams flowing in natural channels, of lakes, sub soil and other natural collection of still water. The Ordinance empowers the government to define, in identified areas, a cropping pattern for the purpose of controlling waterlogging and soil salinity. The government may also impose a ban on cultivation of certain crops in lands situated outside the canal command area and can, in the event of any violation, impose penalties in terms of punishment and fine. The government may also compel land tenants, occupiers or owners to grow particular crop in order to comply with the designed parameters for concerned canal systems or any good reason to control and save water.

4.5.6 Balochistan Irrigation and Drainage Authority Act, 1997

The Balochistan Irrigation and Drainage Authority (BIDA) Act of 1997 transformed the Irrigation Wing of the Irrigation Department into an autonomous Authority for development and management of irrigation, drainage and flood control infrastructure. BIDA exercises powers under the Balochistan Canal and Drainage Ordinance and the Balochistan Groundwater Rights Administration Ordinance to formulate and implement policy guidelines regarding water management and use. It is responsible for developing a sustainable irrigation and drainage network through equitable distribution of irrigation water to improve the efficiency of water utilization while minimizing drainage surplus.

4.5.7 Balochistan Agricultural Produce Markets Act, 1991

The Balochistan Agricultural Produce Markets Act, 1991, provides better regulations of purchase and sale of

agricultural produce and establishment of markets for agricultural produce in the Province. The Government may, by notification, declare an area to be a notified market area and shall exercise control over the purchase and sale of such agricultural produce. By the same measure of notification, the Government shall establish a market committee for every notified market area. The market committee concerned is responsible for issuing licenses to dealers. Powers and duties of the market committees and their composition are set out in the Act. A market committee may levy fees on the agricultural produce bought or sold by or through a dealer in the notified market area. The Act further provides for the establishment of Market Committee Funds. The Government may direct all or any of the disputes, arising in a notified market area, shall be referred to a Board of Arbitrators constituted under this Act. The Act also contains penalty provisions and provisions of miscellaneous nature.

4.6 Existing Legal Framework in Balochistan

The following table summarizes the key features of the two foundational legal instruments – BEPA 2012 and Balochistan Wildlife Act 2014. While purportedly related to environment, they encompass important aspects of climate action via the statutes of multilateral environmental agreements including UNFCCC.

Act	Statute	Details
Balochistan Environmental Protection Act 2012 (Balochistan Provincial Assembly 2012)	Multilateral Environmental Agreements	12. (1) The obligation of the International Conventions, Treaties and Protocols shall be observed as before devolution of the subject of Environment to the Province on Environment or climate change. In case of any international/ bilateral cooperation, the matter shall be proceeded with consultation with the concerned Federal Ministries.
		12. (2) The Government of Balochistan/Environmental Protection Agency shall extend support to those obligation of the International Conventions, Treaties and Protocols where adequate assistance provided by the Federal Government.
	Schedule	11. Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985. 12. Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments thereto. 16. United Nations Framework Convention on Climate Change, Rio De Janeiro, 1992. 24. Kyoto Protocol, 11 December 1997
Balochistan Wildlife Act 2014 (Balochistan Provincial Assembly 2014)	UN framework Convention on Climate Change (UNFCCC)	62. (a) Endeavor to promote sequestration of carbon by effective management of Protected Areas and vegetation in the outer countryside to stabilize or reduce greenhouse gas concentrations in the atmosphere and achieve a level within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner;
		62. (b) promote sustainable management and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems
		62. (c) prepare for adaptation to the impacts of climate change for the species, habitats and ecosystems; and
		62. (d) develop and elaborate appropriate and integrated plans for coastal zone management, water resources and agriculture, and for the protection and rehabilitation of areas, particularly in areas affected by drought and desertification, as well as torrent floods.

5. Policy and Institutional Context

Legislative Measures

While an overview was presented in the previous chapter, we would like to highlight their key elements, may be at the cost of some repetition, to provide a more focused and meaningful context for our subsequent analysis.

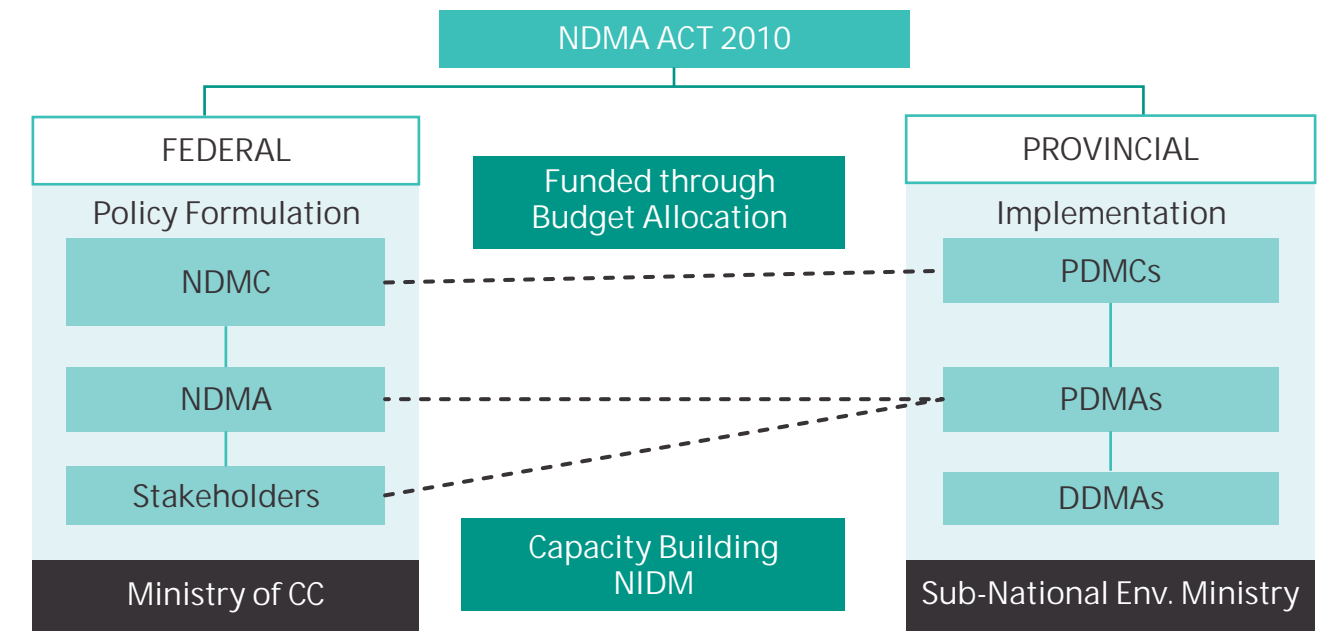
Federal

The National Disaster Management Act 2010 and National Climate Change Act 2017⁴ are the two major laws that cover three out of five targets of the Goal 13. Both are federal laws and apply to the whole of Pakistan. The National Climate Change Act was passed by the National Assembly of Pakistan on 29th November 2016 and now the Act is being debated in the Senate. The Senate Standing Committee on Climate Change unanimously passed the bill on 16th March 2017 paving its way for Senate's approval thereby becoming an enacted law.⁵

The NDMA Act 2010 outlines broader policy guidelines and institutional mandate for all tiers of the government (federal, provincial and district). The Act gives the policy and decision making mandate to National Disaster Management Commission (NDMC). The NDMC comprises of high profile stakeholders including: The Prime Minister (Chair); Leaders of the Opposition in the National Assembly, and the Senate; seven key federal ministers; Chief Ministers of all the four provinces; Prime Minister of AJ & K; Chief Minister of Gilgit-Baltistan; Governor Khyber Pakhtunkhwa (for FATA); and Chairman Joint Chiefs of Staff Committee (JCSC) or his nominee. The Chairman, NDMA, acts as the Secretary to the Commission. In addition, civil society representatives can also be appointed to the Commission by the Chair (Prime Minister).

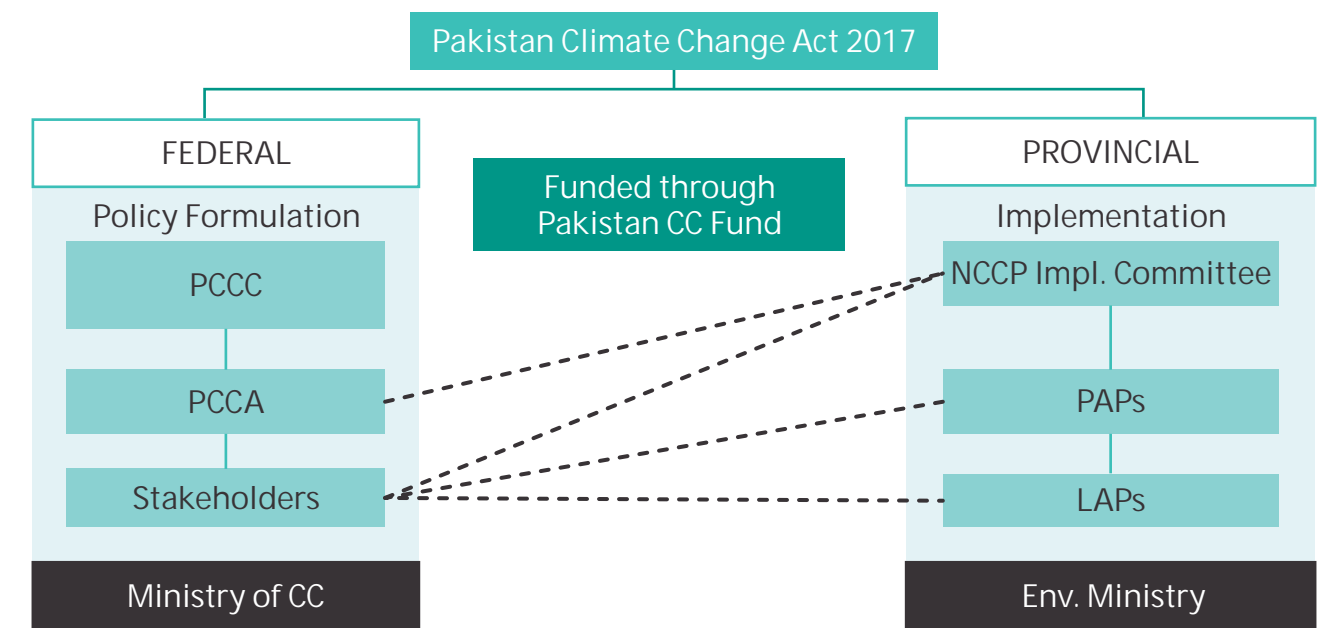
The National Disaster Management Authority (NDMA) is the prime and apex national agency that assumed the operation and management role under the NDMA Act 2010. The NDMA was originally set up in March 2007 under the National Disaster Management Ordinance, 2006. The NDMA has been given a fresh mandate under the NDMA Act 2010 to act as the planning, implementing, coordinating and monitoring Agency/Authority for disaster management.

The NDMA Act has also provided detailed institutional framework for provincial and district level management of disasters. The Act gives considerable autonomy to the provinces to develop their own regulations, plans and strategies. In addition to Provincial Disaster Management Councils (PDMCs) – the sub-national decision making body - the Act also provides detailed structure and mandate of the Provincial Disaster Management Authorities (PDMAs) and District Disaster Management Authorities (DDMAs). It also provides the setting up of the National Institute of Disaster Management (NIDM) for imparting research and training services to public and private sectors.



In an attempt to consolidate the national climate response, the GOP has formulated the Climate Change Act 2017 which resonates with the NDMA Act 2010. However it includes fewer details for provincial arrangements. The Act stipulates to set up the Pakistan Climate Change Council (PCCC) as the apex decision making body with the Prime Minister as the chair. The Act also stipulates setting up the Pakistan Climate Change Authority (PCCA) at federal level to plan, develop and deliver climate change response. It also envisages setting up of the Pakistan Climate Change Fund (PCCF) to undertake strategic projects in mitigation and adaptation.

While the Act does not outline any arrangement at provincial level; however, the NCCP 2012 proposed provincial committees to steer the implementation of climate change policy at provincial level through provincial and local Action Plans (PAPs and LAPs). This is schematically represented by the following table.



4. http://www.na.gov.pk/uploads/documents/1485513841_966.pdf

5. More recently, it has been approved by the Senate. Now it only requires the President's signatures to become a law.

Title	Pakistan Climate Change Act 2017	National Disaster Management Act 2010
Purpose	To meet international obligations and address the effects of climate change	To establishment of a National Disaster Management System for Pakistan
Themes Covered	Climate Change Mitigation & Climate Change Adaptation	Disaster management, disaster response and recovery
Related policies and strategies	National Climate Change Policy (NCCP) 2012, Framework of Implementation of NCCP, Pakistan Intended Nationally Determined Contribution (INDC)	National Disaster Risk Reduction Policy (2013), National Disaster Management Plan 2012-2020
SDGs Targets covered	13.1, 13.2, 13.3	Partial coverage of 13.1; 13.3 within the Act, the related policy and plans cover it fully
Governing Forum	Pakistan Climate Change Council (PCCC)	National Disaster Management Commission (NDMC)
Highest Authority	Prime Minister of Pakistan	Prime Minister of Pakistan
Line Ministries Involved	Climate Change, Finance, Agriculture, Food Security & Research, Planning Development & Reforms, Petroleum & Natural Resources, Science & Technology, Water & Power, Foreign Affairs	Defence, Health, Foreign Affairs, Social Welfare & Special Education, Communications, Finance, Interior
Sub-national Representation	Chief Ministers, Minister-in-charge of Environment	Chief Ministers
non-officals	upto 30 members from civil society, media, private sector, academia	permitted but number not specified
Management Entity		
National	Pakistan Climate Change Authority (PCCA)	National Disaster Management Authority (NDMA)
Provincial	Not specified	Provincial Disaster Management Authority (PDMA)
District	Not specified	District Management Authority (DDMA)
Resource Allocation	Establish dedicated Climate Change Fund	Budget Allocation

Table 2: Key features and Comparison of Pakistan Climate Change Act 2017 and NDMA Act 2010

Provincial

Balochistan Environment Protection Act, 2012

The Balochistan Environment Protection Act, 2012 ("BEPA, 2012) was enacted to regulate and effectively address environmental issues that were specific to the province of Balochistan. The preamble of the Act states that the legislation will "provide for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution, promotion of sustainable development". Whilst the legislation adopted all prior IEE/EIA requirements, it also introduced new sections such as environmental approvals for mining, quarrying and crushing, setting up cellular towers, and specific construction-related measures. The new legislation introduced 15 (fifteen) new region-specific definitions such as "Balochistan coastline or coastal zones" and "historic waters."

Structurally, BEPA, 2012 has more or less retained the administrative structure transplanted from the federal legislation. It establishes a Balochistan Environmental Protection Council (BEPC) delegated with supervising the enforcement of the legislation and providing guidelines. The Balochistan Environmental Protection Agency (BEPA) is then the body responsible for the implementation of the national and provincial environmental policies approved by the Council. It has a very vast mandate listed in Section 6 of the Act. Interestingly, under BEPA, 2012, BEPA also has the power to establish regional or district environmental agencies. BEPA, 2012 specifically retains many of the regulations passed under the 1972 law of PEPA.

Multilateral Environmental Agreements (MEAs) are discussed in section 12 of the legislation. According to BEPA, 2012, "the obligations of the International Conventions, Treaties and Protocols shall be observed as before devolution of the subject of Environment to the Province on Environment or climate change." If the provincial government is to engage in international, bilateral cooperation, there is a requirement for the matter to proceed with consultation with the concerned Federal Ministries. The Act further goes on to say that the Government of Balochistan / Environmental Protection Agency "shall extend support to those obligations of the International Conventions, Treaties and Protocols" where adequate assistance is provided by the Federal Government.

Section 39 of BEPA 2012 confers onto the Government of Balochistan the power, inter alia, to make rules for implementing the provisions of the international environmental agreements specified in the Schedule thereto. Section 40 of BEPA allows the Government of Balochistan to amend the Schedule to include or omit any entries therein. At present, there are thirty (30) international environmental agreements listed in the Schedule to BEPA 2012, including the United Nations Framework Convention on Climate Change ("UNFCCC").

BEPA 2012 gives the Government of Balochistan the power to make rules to implement the provisions of the UNFCCC and other international environmental agreements that have climate-related components. This power to make rules confers legal validity – and obligation – onto the Government of Balochistan to comply with the provisions of the international environmental agreements listed in the Schedule to BEPA.

Balochistan Wildlife Protection, Preservation, Conservation and Management Act, 2014

This legislation is guided primarily by the principle of ensuring the protection, preservation, promotion, conservation, management and sustainable development of wildlife in recognition of its position as a key component of biological diversity with social, cultural, economic and ecological significance for the present and future generations. In recognizing various levels of protected wildlife areas, it adopts the provisions of the international conventions and treaties to which Pakistan is member. It further encourages the active

participation of local communities in the protection of wildlife resources in the province. Community participation is further encouraged through economic incentives and benefit sharing. The Act embraces the principle of co-management of protected areas and the promotion of livelihood activities in protected areas.

Policy and Institutional Measures

Pakistan's response to the challenges of global warming and climate change has traditionally been in the context of environmental conservation and protection, millennium development goals, and ecosystem management. Several legal and institutional arrangements have been made at the national, provincial, and local levels to offset impacts of the climate change and environmental degradation. After the 18th constitutional amendment, however, the GOP's focus started to shift from traditional environmental management and conservation to climate change mitigation and adaptation.

The 18th Amendment altered the relationship between the Federation and the provinces with respect to climate change, albeit not clearly redefining the specific responsibilities. This has created an ambiguity – yet to be clearly resolved - with regard to the formulation and implementation of policies and action plans in areas and themes related to climate change. While MoCC is exercising its mandate for national policies, plans, strategies and programmes about climate change, disaster management, ecology, forestry, wildlife, biodiversity and desertification; the provinces (other than Sindh so far) seem to have assumed the responsibility to implement international environmental agreements, including UNFCCC, after the 18th Amendment.

The MOCC also performs functions of coordination, monitoring and implementation of environmental agreements with other countries, international agencies, and forums. Climate change, at least insofar as specific response against it is concerned, is now generally considered a devolved subject matter by provinces. However, there are still many grey areas needing attention to be more clearly resolved. A very good example of this ambiguous situation is the formulation of their own climate change policies by the provinces of Khyber Pakhtunkhwa, Sindh, and Punjab, though apparently taking care not to openly contradict the national policy.

Historically, Pakistan's initial response to climate change was in the wake of adoption of United Nations Framework Convention on Climate Change (UNFCCC) during the Rio Earth Summit in 1992. The Framework aims to “stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system”⁶. In 1992, Pakistan launched its National Conservation Strategy. The Strategy had three overriding objectives: conservation of natural resources, sustainable development, and improved efficiency in the use and management of resources⁷. The federal cabinet ratified the UNFCCC in 1994, and later, in 1995, constituted the Cabinet Committee on CC which is considered as the first institutional arrangement in Pakistan to coordinate policy response to address climate change. The Cabinet Committee, later, in 2004, was upgraded to Prime Minister's Committee on Climate Change as an overarching body for guidance on climate change issues.

In 1997, Pakistan introduced its first major legislation related to environment management known as Pakistan Environment Protect Act (PEPA, 1997). The PEPA was an over-arching legislative instrument which empowered the government to frame regulations for the protection of the environment. PEPA 1997 replaced the earlier Pakistan Environmental Protection Ordinance, 1983 and incorporated several soft law principles adopted at Stockholm, Rio, and Johannesburg including the prevention principle, the precautionary principle, and the principle of restoration/restitution. Under PEPA 1997, the Pakistan Environmental Protection Agency (EPA)

6. <http://newsroom.unfccc.int/about/>

7. IUNC 1995. The Story of NCS. <https://portals.iucn.org/library/efiles/documents/WCS-PK-029.pdf>

was created which was responsible for the implementation of all environmental policies created by PEPC, at the Federal level. Provincial EPAs were created to implement policies at the provincial level. PEPA 1997, however, expired after the 18th constitutional amendment, in the wake of which the provinces have formulated their provincial environment protect acts and retained the structure of EPAs.

The National Environment Policy was introduced in 2005 to provide sectoral guidelines across a range of sectors, including water supply and management; air quality and noise; waste management; forestry; biodiversity and protected areas; climate change and ozone depletion; energy efficiency and renewables; and agriculture and livestock. It also outlined directions for addressing the cross-sectoral issues as well as the underlying causes of environmental degradation and meeting international obligations.⁸

To generate country specific scientific data on climate change, the Global Change Impact Study Centre (GCISC) was established in 2002 as a dedicated centre for climate change research and providing assistance to national planners and policymakers for strategic planning in the wake of climate change. In January 2005, the GCISC became an autonomous body with the Ministry of Environment and also assigned to serve as the secretariat of the Prime Minister's Committee on Climate Change. From around mid-2000s, the Pakistan Metrological Department (PMD) started to expand its research and data collection to develop scientific knowledge on the impact of climate change on Pakistan. Over this period, the PMD has been active generating scenarios of the impact of climate change on hydrological resources, agriculture and ecology of Pakistan.⁹

In October 2008 the Planning Commission¹⁰ established a Special Task Force on Climate Change, and it was tasked to prepare a detailed report on the impacts of climate change in the country and how best to cope with its growing impacts. This task force produced its report in February 2010 which identified climate risks, threats, vulnerabilities and put forward adaptation and mitigation recommendations across energy, water, agriculture, livestock and forestry sectors. Based on the recommendations of the task force on organisational structure and institutional measures, the Ministry of Environment began the process of developing the National Climate Change Policy. The Ministry of Environment was later devolved to the provinces in 2011 and replaced by the Ministry of Climate Change (MoCC) in 2012. It was under MoCC that the National Climate Change Policy (NCCP) was finalized in the same year (2012).

NCCP 2012 recommends measures to adapt to climate change in the water sector, agriculture and mountain regions, as well as efforts to lower emissions from energy production and deforestation. The introduction of NCCP 2012 brought more coordinated, risk-informed, and participatory approaches to address climate change impacts. The GOP launched NCCP in 2013 followed by the development of the “Framework for Implementation of Climate Change Policy (2014-2030) to set out priority actions and implementation schedule for target sectors. The framework proposed detailed actions to tackle the challenges posed by global warming, mitigate its risks and adapt key sectors of the country's economy to cope with its consequences. The implementation of the NCCP is steered by the National Climate Change Policy Implementation Committee.

By mid-June 2015, the Ministry of Climate Change facilitated the implementation of NCCP at provincial level through setting up Provincial Climate Change Policy Implementation Committees in all provinces, headed by respective Chief Ministers. The MOCC has also managed the development and communication of National Determined Contribution (NDCs) for the 21st Conference of Parties (COP21) under the UNFCCC. The COP21 led to a globally binding agreement on climate change and NDCs are now part of the global agreement. The Pakistan NDC will determine the scope and nature of Pakistan future climate actions. Most of the national

8. National Environmental Policy 2005. http://epd.punjab.gov.pk/system/files/National_Environmental_Policy.pdf

9. Ghulam Rasul. Pakistan Journal of Metrology. Vol7, Issue 13

10. The Planning Commission is a key player in developing sectoral policies, including those related to climate change.

policies and institutional arrangement focus on climate change adaptation and there are not extensive arrangements for mitigation actions.

The climate mitigation action is under the preview of several national institutions. In addition to GCISC as mentioned above, Alternate Energy Development Board (AEDB), Pakistan Council of Renewable Energy Technology (PCRET) and Energy Conservation Centre (ENERCON) are working towards increasing the share of renewable energy and improving energy efficiency in Pakistan. Organisations like Pakistan Council of Research in Water Resources, Pakistan Agricultural Research Council (PARC), Ministry of Food and Agriculture, and Pakistan Environmental Protection Agency (P-EPA) are geared towards enhancing adaptation efforts in the country. Pakistan Meteorological Department gathers scientific data throughout the country and plays a major role in disaster preparedness. National Institute of Oceanography is working in close coordination with PMD to develop early warning systems to combat climate change impacts on coastal areas.

For adaptation actions, National Disaster Management Authority (NDMA), under the administrative control of the Ministry of MOCC, is also working to minimize the impacts of climate change through adaptive and preparedness measures. To plan for a longer term to tackle the disasters (including climate change-induced disasters in particular) work on a 10-year National Disaster Management Plan and National Disaster, Risk Reduction Policy is in progress. As a short-term measure, NDMA has taken steps to improve the weather forecasting capability of Pakistan Meteorological Department (PMD) through induction of Flash Flood Guidance System, Automatic Weather Stations and Integrated Flood Alert System.

Mapping of SGs targets

The following two tables give an overview of the relevance of various national and provincial legislation and policies to the SDG 13 targets.

Table 3: Mapping of SDG 13 targets across existing federal laws & policies

National Policy/Legislation	Target 13.1	Target 13.2	Target 13.3	Target 13.a	Target 13.b
National Climate Change Policy (NCCP, 2012)	✓	✓	✓	✓	✓
National Climate Change Policy Implementation Framework (2013)	✓	✓	✓	✓	✓
National Environment Policy, 2005			✓		✓
National Forest Policy, 2010	✓		✓		✓
National Rangeland Policy, 2010	✓	✓			
National Disaster Risk Reduction Policy, 2013	✓	✓	✓	✓	✓
National Sustainable Development Strategy (2012)	✓	✓			
Pakistan Climate Change Act, 2016	✓	✓	✓	✓	✓
Pakistan Environmental Protection Act, 1997			✓		✓
Forest Act, 1927	✓		✓		✓

Table 4: Mapping of SDG 13 targets across provincial laws & policies

National Policy/Legislation	Target 13.1	Target 13.2	Target 13.3	Target 13.a	Target 13.b
Balochistan Environmental Protection Act, 2012 (Balochistan Provincial Assembly 2012)		✓			
Balochistan Wildlife Protection, Preservation, Conservation and Management Act, 2014 (Balochistan Provincial Assembly 2014)		✓			
Balochistan Conservation Strategy, 2000 (IUCN and Government of Balochistan 2000)			✓		✓
Balochistan Irrigation and Drainage Authority Act, 1997 (Balochistan Provincial Assembly 1997)	✓				

Institutional Framework of Balochistan

The following table summarises the institutional framework of the government of Balochistan with respect to the key functions and responsibilities of its various departments that are relevant for either legislating on climate change or have a role in implementing climate action under the five targets of SDG 13.

Name of Institution	Function and Responsibility
Agriculture & Cooperatives Department	<ul style="list-style-type: none"> • Provide assistance to farmers to increase farm yield by improving access to resources • Increase cultivable land through technological interventions • Improve access to water and energy • Flood prevention
Education Department	<ul style="list-style-type: none"> • Manage education in all its dimensions at the primary, secondary and tertiary level throughout the province.
Energy Department	<ul style="list-style-type: none"> • Electricity related <ul style="list-style-type: none"> ▫ Implementation of relevant Act/Rules ▫ Village Electrification ▫ Implementation of Energy Conservation Program • Nodal Agency • Policy Making • Reconciling QESCO/KESC Bills <ul style="list-style-type: none"> ▫ Subsidized Agri-tubewells ▫ Government Electricity Connections • Oil and gas
Forest and Wildlife Department	<ul style="list-style-type: none"> • Conservation and Development of natural living resources on sustainable use basis through stakeholders' participation to ensure healthy environment and continue supply of goods and services for the benefit of people.

Irrigation and Power Department	<ul style="list-style-type: none"> The development and management of water resources Increasing the role of private sector in increasing water availability and boost agricultural production
Law and Parliamentary Affairs	<ul style="list-style-type: none"> Advice to Departments on all legal matters, including interpretation of laws, rules and orders having the force of law. Matter relating to Provincial Legislature. Constitutional Legislation. Codification of laws and printing of Acts, Rules and Orders.
Planning and Development Department	<ul style="list-style-type: none"> Monitoring and evaluation of the implementation of the major projects Allocation of budget to departments Coordination of policies which address environmental-related subjects
Public Health Engineering Department	<ul style="list-style-type: none"> Provision of clean drinking water and disposal of waste centralized, implementing agencies
Science & information technology Department	<ul style="list-style-type: none"> To support / facilitate computerization, automation and re-engineering of provincial government business processes leading to e-Government for continuous Improvement in the state of efficiency, effectiveness and transparency in service delivery and decision making
Social Welfare, special education, Literacy/ Non-Formal Education and Human Rights Department	<ul style="list-style-type: none"> Service delivery: removing disabling conditions, regaining normal functioning; needy groups, under-privileged sector in society, minimum standard of service provision, emergency relief, ad hoc basis, remedy gross hardships and human sufferings, minimum state intervention, private and family care, alleviate abnormalities and other social services; Positive & preventive: early prevent abnormal behavior and conditions; creating new conditions; eliminate causes of problems, research analysis on causes for effective prevention, prevention is better than cure, screening service, early identification, systematic planning, universal services. Developmental: improving situations, development of individual and society, constructive planning, social investment, awareness on social responsibility, develop potentials and new capacities, growth towards mature and responsible citizenship; Supportive: achieving objectives of other sectors in society; mutual benefits among various service, support services, education and continuous training, community support; inter-related nature of various social policies; better effectiveness and efficiency, economy;
Urban Planning and Development Department	<ul style="list-style-type: none"> Land use/Urban Planning Planning & Controlling of projects related to civic facilities Quetta Development Authority (QDA) Town Development and Housing Preparation of Master plan, outline Development schemes and Town improvement schemes Plan design, construct, operate and maintain water supply sewerage and sanitation systems

Women Development Department	<ul style="list-style-type: none"> Legislation, policy formulation and sectoral planning for women development Implementation of administrative and institutional reforms and departmental restructuring for promoting gender equality Mainstreaming gender equality perspective across public policies, laws, programs, and projects by departments and agencies Promotion, coordination and monitoring of execution of national and provincial policies and commitments Provision of technical support and expertise for gender mainstreaming in all departments of the government and its agencies
Provincial Disaster Management Authority	<ul style="list-style-type: none"> Formulate disaster management plans addressing the different vulnerabilities, Enhancing disaster preparedness, and ensuring effective coordination Promoting education and awareness Monitoring implementation of national policies and plans
Environmental Protection Agency	<ul style="list-style-type: none"> Protection of the environment Implementation and planning of environment based projects Enforcement of environmental regulations and laws Promoting environmental awareness and education To control environmental pollution

6. Legal and Policy Gap Analysis

As discussed earlier, there are only two provincial laws, namely the Balochistan Environmental Protection Act 2012 and Balochistan Wildlife Act 2014, which mention 'climate change' (in the context of UNFCCC). In the absence of any tailored provincial climate change policy, the NCCP 2012, NCCP implementation Framework, and National DRR policy 2013 provide the context to facilitate local climate mitigation and adaptation actions.

Despite the devolution of powers to the provinces under the 18th constitutional amendment, the progress towards climate change related legislation or policy enactment in Balochistan has been limited. The provinces have to plan and implement their own development policies. Khyber Pakhtunkhwa, Punjab, and Sindh have considered 'climate change' as a devolved matter which is why they are in the process of developing their own provincial climate change policies that are about to be finalized. Of the four provinces of Pakistan, Balochistan, is lagging behind, without even initiating a process of drafting a climate change policy which is tailored to the provincial needs.

The Policy Implementation Mechanism that was envisaged in NCCP and DRR Policy has not yet materialized in Balochistan. Actions under BEPA 2012 can be termed as an exception, but they rarely constitute hard core climate action. With the introduction of the Climate Change Act 2017, the province needs to undertake sustained measures, both at legislative and policy level. Currently, there is no dedicated ministry charged with managing climate change and the Department of Environment, Sports & Youth Affairs serves as the focal ministry for the implementation of the NCCP. Moreover, the parliamentarians' orientation and engagement with regard to climate change are very limited, consequently relegating it to a low priority among the decision makers.

Policy Gaps

The NCCP and its Policy Implementation Mechanism have yet to be meaningfully applied to the province partly because they need to be tailored to the specificities of Balochistan. One major reason reported for the absence of contextualised legal and policy framework is that, among key stakeholders, the understanding of the gravity of climate change impacts across different sectors is inadequate. Because of an ongoing insurgency and incidents of terrorism, the provincial government is occupied with security issues rather than formulating a comprehensive response to climate change. Likewise, availability of relevant data and pertinent research, the evidence from which can convince decision makers, are either insufficient or ineffective. The province requires an extensive policy work and capacity building to deliver targets of SDG13. The future decision making must be risk informed and grounded in the local knowledge and effective participation of local actors. The key challenges identified in this study are:

- The Government of Balochistan has no policy on climate change or climate action. In the absence of a provincial climate action strategy and action plan, the application of NCCP has been difficult for practitioners. (Rafay Alam, Environmental Lawyer and Legal Consultant for this study)
- Understanding of climate change impacts and the attribution of these impacts on different sectors and priority areas of the province is inadequate.
- Climate relevant expenditure, funded by internal provincial budget, has apparently grown in the last five years but the projects implemented through these are not producing optimal results. That is because most

of these expenses are incurred in a business-as-usual planning mode rather than as a focused intent on climate action. (UNDP, 2016. Balochistan: Climate Change Budget and Institutional Assessment)

- Poor energy policies have facilitated the exploitation of ground water by subsidising the electricity usage on tubewells operation in the province. Water extraction from tube wells, which are afforded by a few, have reduced the water availability for the majority of the province's population. Exacerbated by climate change impacts, the water scarcity problem in the province has led to the drying up of the age-old Karez¹¹ system.
- Participatory approach that enjoins including different stakeholders, to policy formation, is ideal, but given weak coordination and absence of dedicated focal person/institutions, this participatory process is often difficult to administer in Balochistan. Owing to limited technical capacities in practice it impedes the development and implementation of legal and non-legal instruments.

Legal Gaps

- It is important to highlight that the Federal Legislative list does not contain the subject of climate change. Therefore, a bare reading of the Constitution suggests that the Federation does not have executive authority over the subject of climate change and that the National Assembly does not have the jurisdiction to legislate upon climate change. As the Constitution stands, the subject of climate change is of provincial legislative competence alone. (Rafay Alam, Environmental Lawyer and Legal Consultant for this study). However, as pointed out earlier that under Article 144 of the Constitution, a resolution may be passed by one or more Provincial Assemblies requesting Parliament to make a law on a subject otherwise of a provincial nature. Moreover, the current federal ROB do identify the Ministry of Climate Change as a federal department. This creates an ambivalence, if not outright confusion with regard to legislation on climate change.
- Because of this ambivalence, while the Federal Government has taken the lead on formulating national policies, plans, strategies, etc. on climate change; the provinces of Khyber Pakhtunkhwa, Sindh, and Punjab are in the process of developing their own climate change policies considering 'climate change' as a devolved subject matter, as far as provincial policies and action plans are considered. Balochistan could also follow suite for greater province specific climate action.
- BEPA 2012 confers onto the Government of Balochistan, the responsibility to implement international environmental agreements, including the UNFCCC. However, the Government of Balochistan has taken no steps in furtherance of this responsibility. Balochistan Environment Protection Act 2012 and Wildlife Act 2014 mention the implementation of the UNFCCC through its statutes and schedule. Given weak implementation capacity and arrangement, the enforcement of Act is inadequate.
- The BGROB 2012 have not been updated to reflect the responsibility of the Government of Balochistan to combat climate change. At present, the only mention of climate change is allocated to the business of the Forest and Wildlife Department. The BGROB 2012 needs to be updated to allocate the responsibility of implementing international environmental agreements, including the UNFCCC, to a specific Department and to equip that Department with the budget and manpower to formulate and implement a provincial policy on climate change.
- The recently enacted Pakistan Climate Change Act 2017 and its legal obligations on the province are to be determined. As the operationalization of NCCP and DRR policy has not yet made significant progress, there is

11. The ancient Karez system is comprised of a series of wells and linking underground channels that uses gravity to bring ground water to the surface, usually far from the source.

an urgent need to mainstream and institutionalise climate-related laws into a single package at the provincial level.

- Climate change and related sectors contain technical concepts, and currently, the understanding among parliamentarians is very limited to allow any meaningful deliberation and decision making. Likewise, the government departments and organs lack capacity and knowledge of transforming laws and policies into workable 'rules of business' inhibiting implementation of existing legal and non-legal instruments. (Rafay Alam, Environmental Lawyer and Legal Consultant for this study.)

Institutional Gaps

- Unlike other provinces such as Punjab and Sindh, there is no dedicated department or agency tasked with providing stewardship for the mainstreaming and integration of SDGs across various functions the department.
- Climate change is a cross-cutting issue and requires synergies across several line departments. Currently, there is an absence of any focal persons for coordination and development of localised SDG indicators.
- Pakistan uses EM-DAT disaster data reporting, and some of the SDG 13 indicators are covered in this reporting format. In the case of Balochistan, there is no clear mandate and mechanisms for monitoring, reporting, and verification of measuring SDG 13's indicators¹² progress and performance.
- The provincial statistical department does not collect climate-related data, nor are they engaged in development planning. There is some data collection by PDMA. However, their information collection is limited to disaster response and recovery (FGD, Data Users and Producers, Quetta, December 21, 2016)
- The Annual Development Plans (ADP) are the main instrument of development planning at the local level. Currently, Balochistan's ADP is not tagged for reporting progress on SDGs neither does it incorporate climate risks into the planning.
- The resource allocation is highly skewed towards non-development expenditure and security measures. As climate change is not recognised as a threat to human, social and agriculture systems, their funds for climate actions are not earmarked.

Overall Recommendations

- A Climate Change policy needs to be developed and implemented in line with the legal authority for the Government of Balochistan to implement international environmental agreements such as the UNFCCC [Widely recommended during all FGDs (1. Data Users and Producers, Quetta, December 21, 2016. 2. CSOs, Quetta, December 22, 2016. 3. Legal and Institutional Experts, Quetta, December 23, 2016); Many Key Informants especially, Dr. Zahoor Bazai (Quetta, December 8, 2016) also recommended it.
- A climate change cell under the Planning and Development Ministry must be made functional with adequate capacity and mandate. (Recommendation of the Study Team based on reflections from the FGDs and KIIs wherein it was recommended that the P&DD should play a coordinating role. The governments of Punjab and Sindh have already decided to do so.)

12. Though the SDG13 indicators falls under Tier III and there is still some work to be done developing concrete methodology. The work of Open Ended Working Group on Sendai Definition and Indicators is expected to formulate indicators for the seven targets of SFDRR. The four out of seven targets of SFDRR are clubbed into SDG13 and still need clarity how to report it.

- The climate change cell, in P&D, should also have a reporting role to a higher provincial Climate Change Authority. This Authority should be responsible for formulating and enforcing climate-relevant laws and rules forming the basis of legal and non-legal instruments for climate action. This will reduce the problem of fragmentation of roles and responsibility for climate action.

- To elevate the capacity of parliamentarians to enact new climate-related laws followed by enhancing the quality of debate and deliberations at the parliament, the MPs require reaching and knowledge management support in the plain and local language. Expanding the current operations of the Pakistan Institute of Parliamentary Services (PIPS) can provide a short term solution. In the longer term, there is need of dedicated Climate Change Centre to support parliamentary work in the province. (Recommendation of the Study Team based on its knowledge and understanding of what could be the best mechanism for doing so.)

- Policies need to adopt an inclusive approach to climate action by protecting the rights of vulnerable communities, women, and minorities, thereby facilitating a whole-of-society approach. To increase transparency in implementation EPD should be the custodian department monitored by P&D Department. (Partly from the FGDs, especially with the Legal and Institutional Experts which recommended the dual role of EPD and P&DD, overlaid with the latest studies on climate change and poverty; for example, Stephane, H. et al., 2015. Shock Waves: Managing the Impacts of Climate Change on Poverty., Washington, DC: World Bank.

- In order to adopt a participatory approach, the Climate change cell should increase integration of different stakeholders in policy development through consultations and capacity building exercises. Climate change cell will need to strengthen its coordination with different stakeholders.

Target Specific Recommendations

Strengthening resilience and adaptive capacity (Target 13.1)

Balochistan's vulnerability to flash floods, droughts, and cyclones is exacerbated by rising temperatures. This warrants priority actions to build resilience and adaptive capacities. Exposed by a large coastline, the vulnerabilities of people residing in the coastal areas is likely to increase, both due to the uncertainty and imminent nature of climate impacts on the coast of the province (IUCN 2011). The government of Balochistan, through projects in key departments, has maintained the share of climate-relevant projects at 50 percent (UNDP 2016). To strengthen resilience and adaptive capacity to climate induced hazards and disasters the province lacks the legal and policy framework, details of which are discussed below.

“Wool from Camels in Balochistan is used to make carpets, which are exported. With reduction in rainfall and prevalent drought-like conditions the amount of fodder available for the animal has plummeted. As a result of which the livelihood of people involved in the carpet making business has either reduced or finished completely. The loss of skill can be seen in the generation to come, who will not have had an opportunity to learn the skill of carpet making. Some of the dire consequences of this can be attributed to climate change”- Kaleem Ullah Niazi, Consultant Environmental Impact Assessment

Key reflections from the consultations

- Provincial legal and policy instruments lack the mention of measures which could enhance resilience and

adaptive capacity in the province, whereas federal instruments are not tailored to provincial needs. (FGD with Legal and Institutional Experts, Quetta, December 23, 2016)

- Resilience building and adaptive capacity measures are not tailored to each sector of Balochistan. FGD with Legal and Institutional Experts, Quetta, December 23, 2016
- Robust district-wise data on climate induced hazards affecting Balochistan is lacking. FGD with Legal and Institutional Experts, Quetta, December 23, 2016; also KII, Irfan Bakhtiari, Quetta, December 8, 2016)

Recommendations

- Relevant policies and laws (notably NCCP, 2012, National DRR Policy 2013, Climate Change Act 2017) need to be tailored to provincial needs and circumstance. As a first step, a comprehensive provincial climate policy instrument should be developed. (Based on the reflections, recommendation of the Study Team).
- A climate action strategy should be developed to meet the SDG13 targets as well as other priority sectors which are directly affected by climate change, namely energy, water, agriculture, and forest. (Based on these reflections, recommendation of the Study Team).
- A Climate Action plan which identifies activities (capacity building, research, technology transfer, education, awareness raising, and institutional strengthening) needs to be developed in order to meet SDG 13 targets and channel climate relevant spending effectively. (Based on these reflections, recommendation of the Study Team).
- Legal and non-legal instruments should take into account Balochistan's diverse geographical landscape and related local realities while establishing an institutional framework for the implementation. (Based on these reflections, recommendation of the Study Team).

Integrating climate change measures (Target 13.2)

Post 18th amendment Balochistan, like other provinces of Pakistan, can develop its policies and laws to enable climate action in the province. Currently, the climate funds are being dispensed to the province without any dedicated legal and policy instrument (UNDP 2016). The diverse landscape of the districts of Balochistan requires policy measures which are tailored to provincial needs and backed by legislative instruments. BGROB 2012 reveal a mention of 'climate change' in the responsibilities of the forest and wildlife department, however this is in the context of increasing carbon sinks and is insufficient to cover the SDG 13 targets. Environment section of the Environment, Sports and Youth Department can develop policies and plans for environmental protection however climate change is not a part of departmental responsibility as discussed in chapter 4.

Key reflections from the consultations

- In the absence of sub-national policies the national policies (NCCP, DRR policy, and NCCP framework for implementation) are applicable to the province. However, their implementation has been non-existent as these instruments do not take into account the provincial needs. The current legislative framework is insufficient to meet the goals of climate action or provide support to policy implementation. Sectoral linkages to ensure climate action are absent for both policy and legal instruments.
- Climate funds are disbursed to the province through the Federation. Apart from the Balochistan

Environmental Protection Act 2012 and Balochistan Wildlife Act 2014, there are no dedicated laws or policies to ensure the budgeting of adequate resources, whether technical or financial. (Follows from research carried out by the Study Team confirmed by Rafay Alam, Legal Consultant and FGD with Legal and Institutional Experts, Quetta, December 23, 2016)

- There is no clear mechanism for implementing projects and plans to enhance climate action in the province. Those consulted report a lack of clarity on procedures, responsibilities and fragmented roles to include climate agenda in the development process of the province. FGD with Legal and Institutional Experts, Quetta, December 23, 2016; also FGD with Civil Society Organizations, Quetta, December 22, 2016 and KII, Kaleem Ullah, Quetta, December 8, 2016)

Recommendations

- A provincial climate change policy should be supported by a climate change strategy, and an action plan. The strategy will help identify priority sectors and measures. A climate action plan can help in dispensing funds which can help meet SDG 13 targets.
- To reduce fragmentation of roles and responsibilities a climate change cell should be constituted in the P&D department to coordinate and oversee all climate-relevant investment and planning. Clear roles and responsibilities for ensuring climate action should be drafted for this cell to reduce the fragmentation in functions of climate relevant departments. (Based on these reflections and its own research, recommendation of the Study Team, especially since both Punjab and Sindh have also either set it up or planning to do so).
- The climate change cell should be responsible for liaising with the Ministry of Climate Change for reporting on the performance of SDG 13 targets and indicators. The cell should also be responsible for localisation of SDG 13 targets and indicators to Balochistan.
- The climate change cell should establish clear procedures for including SDG targets in the development process. The localised indicators and their performance should be monitored by designated authorities and included in the development planning agenda.
- The climate change cell will provide the mechanism required to meet the objectives of the SDG targets by transferring responsibilities to enable climate action in the province. This mechanism needs to be supported by tools backed by law.
- The cell should identify priority sectors such as agriculture, water and forestry; and develop localized targets for SDG 13. The cell should help integrate climate action into sectoral policies, laws, and rules of business.
- The climate change cell should designate focal persons for climate action in all relevant departments. The focal persons in the departments should receive training to develop rules of business for enabling climate action.
- A Climate Change Authority should be established. This Authority should be responsible for formulating and enforcing climate-relevant laws and rules forming the basis for climate action. (Recommendation from the Ministry of Climate Change already enacted as a law).

Improving climate knowledge (Target 13.3)

Education and awareness on climate change impacts are necessary for climate action. This needs to be supported by an increase in human and institutional capacity to ensure sustainability and to meet SDG 13 targets. The education and research capacity in the province, especially targeted at reducing climate change impacts is low (IUCN 2011). Education and communication, combined, received 43% of the overall ADP allocation for 2014-15 in Balochistan. However, the climate relevance of these allocations has remained between 10-20% from 2012-13 to 2014-15 showing no clear trend across the studied years (UNDP 2016).

Key reflections from the consultations

- The level of awareness related to climate change is low. Vulnerable people of the province are unable to predict changes in the seasons, temperature, and precipitation. In the absence of proper technical guidance vulnerable segments of the population, especially farmers, are unable to plan and adapt. Traditional knowledge on adaptation remains unutilized owing to lack of funds; but it is also insufficient in dealing with unexpected extreme impacts of climate change. (FGD with Civil Society Organizations, Quetta, December 22, 2016; (KII, Mr. Zahid Ahmed Mengal, Quetta, December 8, 2016)
- Not sufficient focus on climate change in education. For example, there is only a chapter on climate change and is not being taught as a full subject for the importance it warrants. (KII, Dr. Zahoor Bazai, Quetta, December 8, 2016)
- Research on climate change related issues is limited, and its focus is on limited sectors. Scientifically backed and locally relevant research about climate action, which is understandable by common people of the province is lacking. (FGD with Data Users and Producers, Quetta, December 21, 2016; KII, Dr. Zahoor Bazai, Quetta, December 8, 2016)
- While academia is involved in delivering some trainings related to climate change, aimed at building the capacity of various stakeholders, these are deemed insufficient in affecting change in the province. (FGD with Data Users and Producers predominantly academics, Quetta, December 21, 2016; KII, Dr. Zahoor Bazai, Quetta, December 8, 2016)

Recommendations

- A Climate Change Centre should be established to study the impacts of climate change impacts on different sectors of Balochistan. The Centre should facilitate in evidence-based policy making through research. The Centre should provide input to key stakeholders, especially the climate change cell. The Centre should provide training and capacity building for skills development and enhancement.
- (Based on these reflections and its own research (for example, Agricultural University Peshawar has such a Centre) recommendation of the Study Team. Also proposed by Dr. Zahoor Bazai in his KII).
- Climate change should be offered as a subject in primary, secondary, and tertiary level education institutes of Balochistan. (Based on reflections from FGD with Data Users and Producers; also recommended in two other KIIs: KII, Dr. Zahoor Bazai, Quetta, December 8, 2016 and KII, Atta ul Haq Khaderzai, Quetta, December 8, 2016)
- and its own research, recommendation of the Study Team).

- Projects and programs which are designed to combat climate change need to increase community participation and ownership to ensure sustainability of actions taken. (FGD with Civil Society Organizations, Quetta, December 22, 2016)
- Legal review of all applicable laws to remove contradictions with climate action agenda needs to be initiated. (Rafay Alam, Environmental Lawyer and Legal Consultant for this study)
- Awareness campaigns which help enhance community ownership and facilitate climate action need to be increased, also to shape political will. (FGD with Civil Society Organizations, Quetta, December 22, 2016; also KII with Zahid Mengal and Irfan Bakhtiari, Quetta, December 8, 2016)

Means of Implementation (13.a & 13.b)

Climate Finance (13.a): Implement the commitment undertaken by Federal government and donors to finance climate action in Balochistan in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization.

Government of Balochistan's contribution for financing climate action related activities is 84-88% from 2011-15 whereas federal assistance is between 12-16% (UNDP 2016). Lack of any sizeable foreign funding for the province, through ADPs, uses internal resources to fund adaptation, mitigation, and DRR related activities across different sectors and cross-cutting themes. Lowest allocation of ADP funds was awarded to mitigation related activities (14%, in 2014-15). Currently, no mechanism for ensuring transparency on implementation exists in the province (UNDP 2016).

Key reflections from the consultations

- Funding from federal sources remains low; only some international donors have invested in the climate action in the province. This view seemed to be dominant across CSOs, data users and producers, and legal experts. (All FGDs mentioned herein)
- In the absence of a tailored climate change policy the internal/provincial funds are being disbursed into the water sector, which has massive inefficiencies owing to poor policies and laws. (KII, Kaleem Ullah Niazi, Quetta, December 8, 2016)
- The climate-relevant funds are being spent on projects which, from a theoretical point of view, have limited potential for climate action and sustainability (From the Climate Public Expenditure and Institutional Review of Balochistan commissioned by UNDP to LEAD: UNDP, 2016. Balochistan?: Climate Change Budget and Institutional Assessment)
- Capacity Building (13.b): Allocation of expenditure to climate-relevant themes in ADP 2014-15 in climate change supporting activities was 16 % (remaining 70% was adaptation and 14% mitigation). This was spent entirely on awareness and education and capacity building plus institutional strengthening (UNDP 2016). The effects of these budgetary allocations have had limited effectiveness on-ground where the need for capacity building and institutional strengthening for improvement in management is continuously cited as a hindrance (IUCN 2011). In the absence of a dedicated climate change policy and law for facilitating climate action in the province, there are no clear mechanisms to assess on-ground the effects of these budgetary allocations.

Key reflections from the consultations

- The federal government should assist in capacity building of human resources. (All FGDs plus most KIIs)
- Roles and responsibilities of government institutions in capacity building remain unclear. (FGD with Data Users and Producers, Quetta, December 21, 2016)
- Mechanism for ensuring the effectiveness and inclusiveness of climate action through capacity building and training has not been established. (Based on what was reported in the consultations and its own research, it's a key reflection of the Study Team).
- The overall institutional ecosystem in Balochistan is weak. Policies and laws are not tailored to the provincial needs or cognizant of local institutional capacities. As a result implementation suffers. (Based on what was reported in the consultations and its own research, it's a key reflection of the Study Team).

Recommendations

- Balochistan needs to develop its climate change cell to increase coordination, planning, and regulation for climate action. This cell should be housed where its activities can have a significant leeway. The roles and responsibility for climate action appear fragmented and split between different departments, namely Environment, Forest and Wildlife, and P&DD.¹³ Climate Change Cell can potentially consolidate these responsibilities under the mandate of a single entity. (Based on reporting and reflections from FGDs and KIIs, and its own research, recommendation of the Study Team).
- The government of Balochistan, with limited help from federal and international donors, has allocated a significant portion of climate-relevant expenditure. However, this expenditure needs to be disbursed through a tailored legal and policy framework. Recommendation based on the Climate Public Expenditure and Institutional Review of Balochistan commissioned by UNDP to LEAD: UNDP, 2016. Balochistan?: Climate Change Budget and Institutional Assessment)
- The province should take steps to enforce the Paris Agreement through a climate change policy and by updating its rules of business. (Based on reporting and reflections from FGDs and KIIs, and its own research, recommendation of the Study Team).

Broad summary of the recommendations is provided by figure 0-1 below



Figure 0-1 Recommendations

13. Example Chief Conservator Forests of Balochistan is on the Implementation Committee of NCCP, and Department of Environment is tasked with climate change and environment governance in the province.

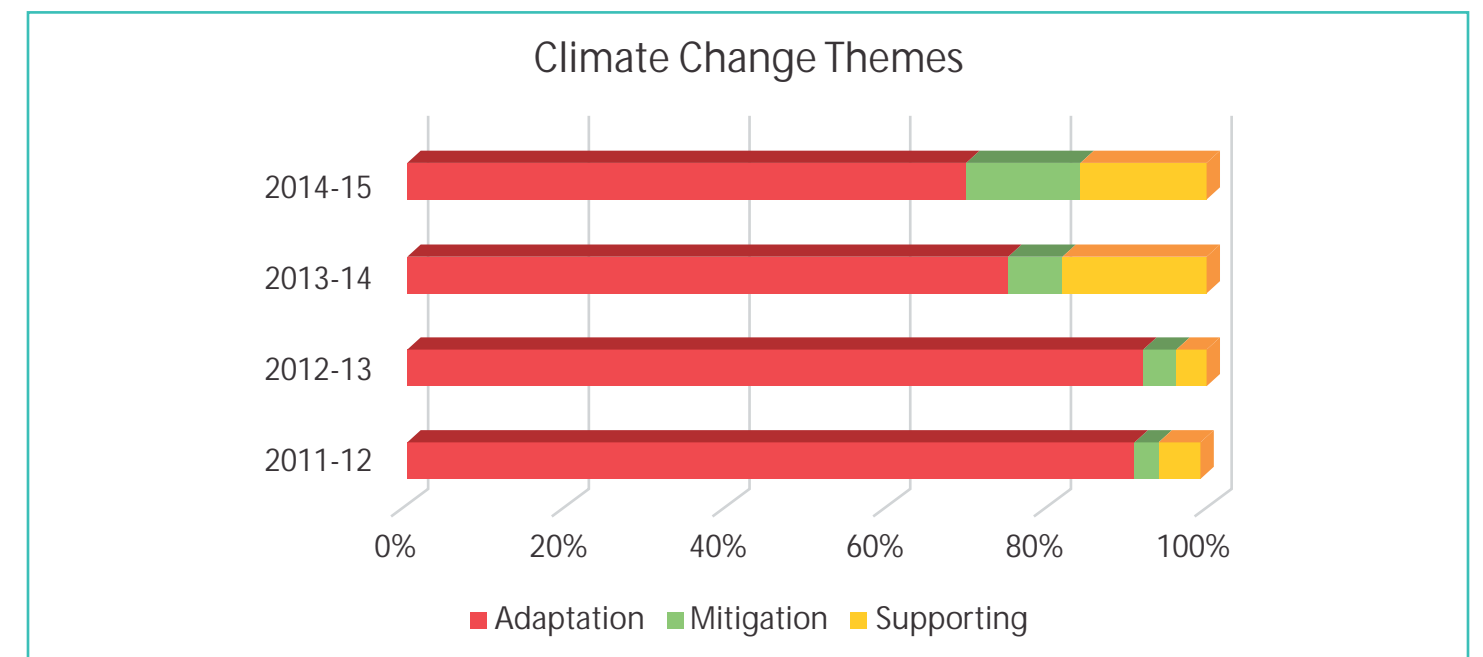
7. Budgetary Analysis

The Pakistan Climate Public Expenditure and Institutional Review (CPEIR) aims at finding out climate change relevant spending in projects related to Balochistan provincial departments. This report looks into the budget allocation of public funds assessing to what extent Balochistan is spending on projects and initiatives that directly or indirectly help tackle Climate Change. The study also looks into the relevant institutional setup and policy frameworks that guide these investments and recurrent expenses. The key findings of this report, relevant to the study, are mentioned in the paragraphs below (UNDP 2016). The key highlights of the budget include:

- From 2011 to 2015 climate-relevant spending in Balochistan has increased by 141% (PKR 9.4 Billion in 2011 to PKR 22.6 Billion in 2015).
- Climate-relevant budget constitutes between 7.3 and 11.3 percent of the total provincial budget.
- Between 6 and 15 percent of Balochistan's budget is climate relevant. Between 2011 and 2015 the rate of annual increase in climate-relevant development investment was 29.2 percent, higher than the rate of annual increase in development budget (7.3%).
- More than half of the projects mentioned in the Provincial Annual Development Plan (ADP) are climate-relevant. These projects are spread across a wide range of sectors, which the ADP deals with. The government of Balochistan's climate-relevant projects make up 76-82% of the development expenditure.
- Climate relevant investments made through the ADPs by different line departments have remained stable across the studied years. Irrigation & power and Communication & Works spend 41-59% of their budgets on portfolios related to climate (UNDP 2016).

The budgetary analysis indicates a gradual rise in finances for mitigation and relating supporting actions. The table 6-1 shows climate-relevant spending on adaptation, mitigation, and climate change supporting activities.

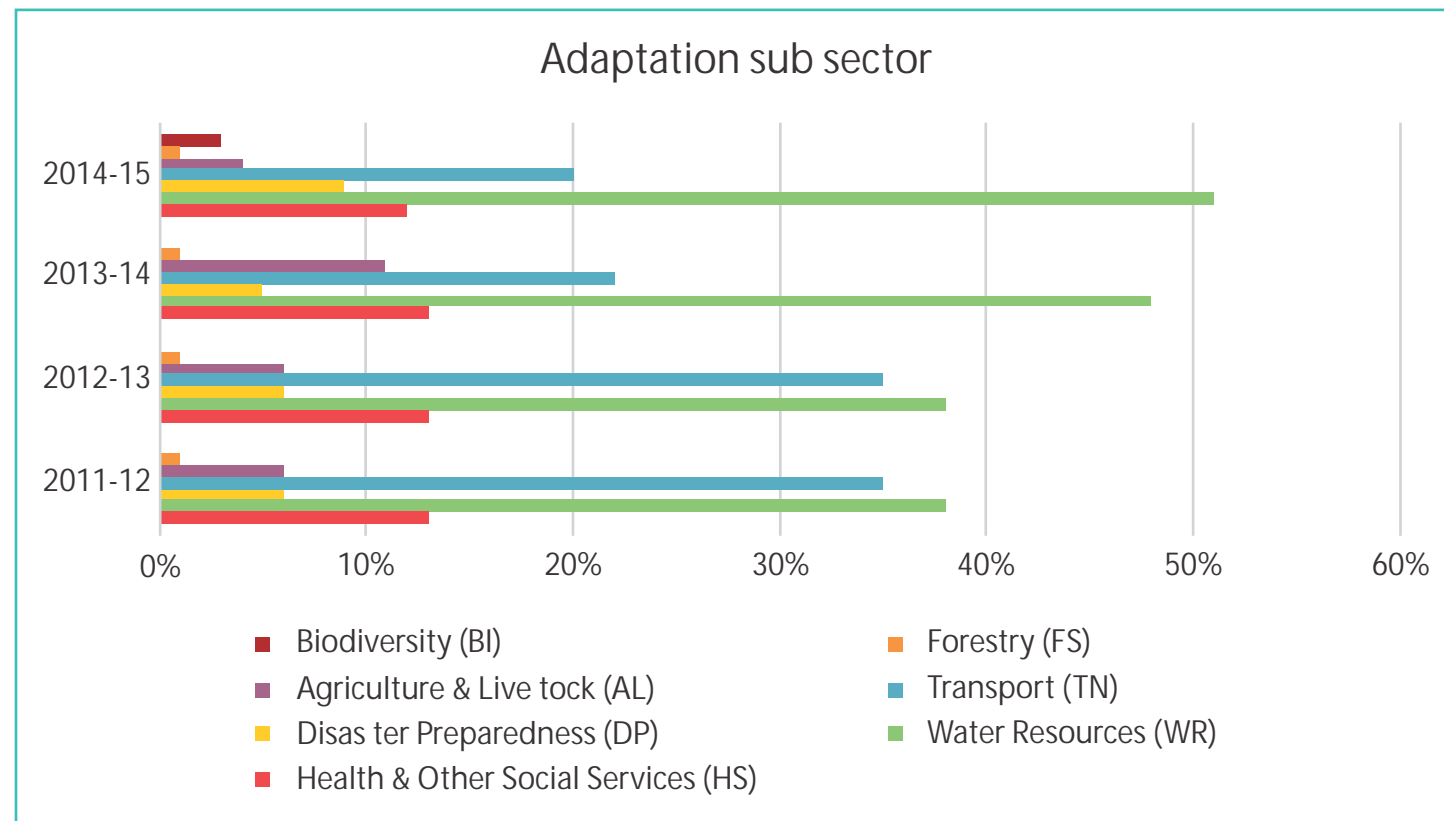
Table 6-1 Climate Change Themes



In Balochistan's development budget 'adaptation' to climate change impacts was the dominant theme of the climate relevant expenditure (70%) most of which was spent on the sub-themes of water resources, transport, health & social services, and disaster preparedness. In the same year, (2014-15) (see Table 6-2), 'mitigation' related investments received the lowest allocation (14%) Most of the mitigation related expenditure was spent on the sub-themes of town planning, energy, transport, and forestry (see Table 6-2) (UNDP 2016).

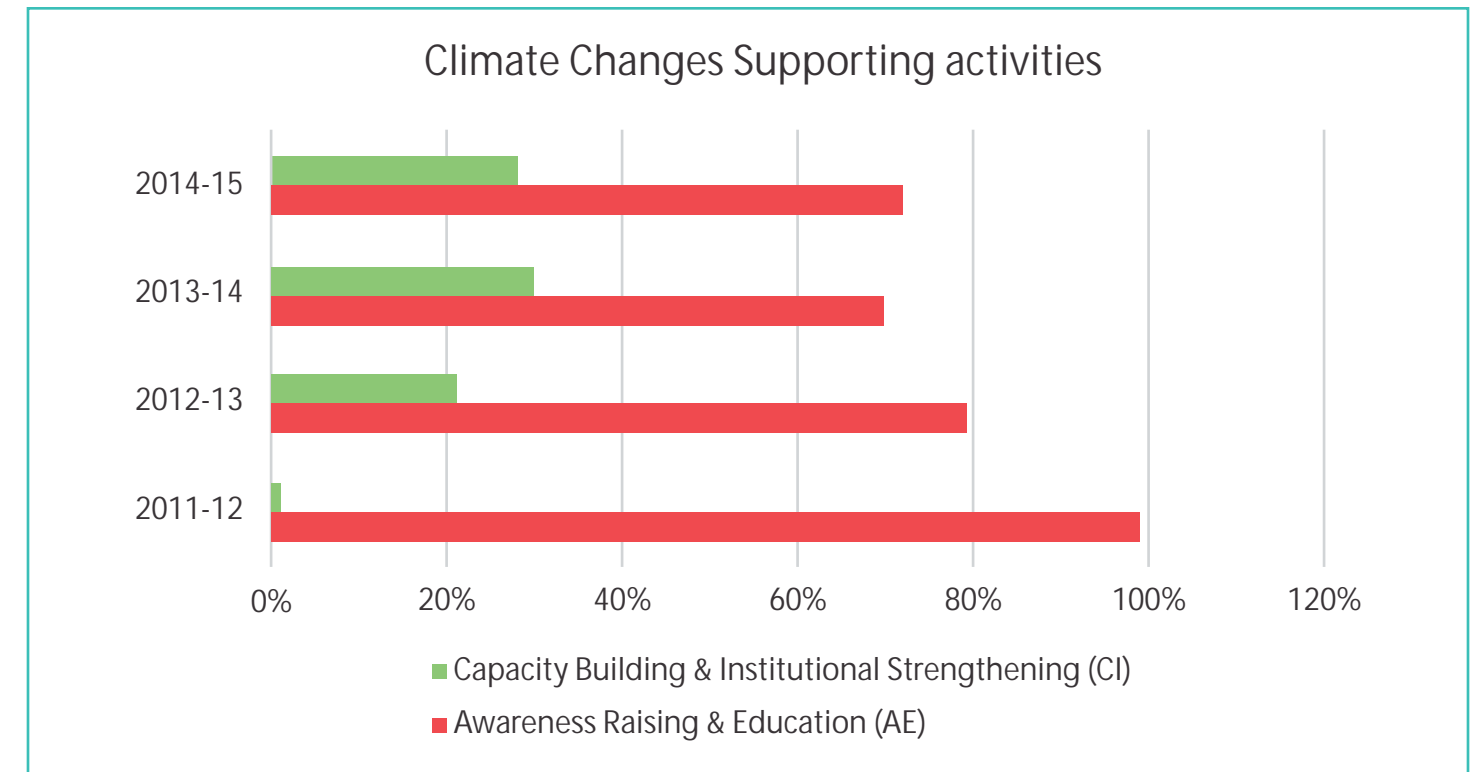
The water sector has been receiving largest share which corresponds with the sectoral adaptation needs of the province. The agriculture sector allocations are lower considering the province is mostly rural and agriculture and livestock are the major sources of income. Out of the total climate component of the ADP of 2014-15 the sectors and their percentage breakup is as follows: water resources (35%), transport (15%), awareness-raising & education (12%), disaster preparedness (9%), and energy (6%) (UNDP 2016).

Table 6-2 Adaptation sub-sector



Climate Change supporting activities such as awareness raising & education, capacity building, and institutional strengthening received a significant amount of budgetary allocations in 2014-15. Awareness raising & education received 72% of the total climate change supporting activities in development budget while capacity building & institutional strengthening received 28% (see table 6-3) (UNDP 2016).

Table 6-3 Climate Change supporting activities



8. Conclusion

The SDG for Climate Action, through five targets and five indicators, provides opportunities for sustainable development in Balochistan. The analysis of data gathered through this study shows that the legal and policy framework, which is tailored to provincial needs, is all but absent. The regulatory, institutional, political, and financial aspects of climate action will need to be either created or reoriented to meet the targets set out by SDG 13.

Like other provinces, Balochistan will need to develop a climate change policy which is geared towards enhancing resilience and adaptive capacity to climate change impacts. The policy needs to be supported by a strong implementation mechanism in the form of a Climate Change Cell. This cell should be held responsible for the implementation of the policy and liaising with climate-relevant sectors/departments. Developing a climate change strategy and action plan should also fall under the functions of this cell. The Cell should also have a reporting role to a Climate Change Authority. This Authority should be responsible for the monitoring and verification of climate related projects and spending. It should also be responsible for formulating and enforcing climate-relevant laws and updating BGROB forming the basis of legal and non-legal instruments for climate action.

Establishing a Climate Change Centre in a public sector university of Balochistan will help in data gathering, training, capacity building, education, and awareness raising. This integrated approach will add to the benefits of goal-based planning and help explore opportunities for sustainable development.

Climate-relevant spending in the province has increased over the years (2011-15); it occupies a significant portion of the provincial budget, and the rate of increase of the climate expenditure has also grown. Budget weighs heavily on adaptation and climate change supporting activities, but the results of these investments have not been experienced by the key stakeholders on ground.

The federal government has a vital role in helping dispense climate funds to meet objectives of SDG 13 and capacity development of key stakeholders. In case of Balochistan the federal government needs to apply a concentrated effort in order to help the province keep up with the other provinces.

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Annexure 1

1.1: Study Methodology & Tools

The methodology for this research study on finding legislative and policy gaps pertaining to SDG 13 and its implementation aims to examine the existing policies, procedures, legislation, regulatory and financial mechanisms that are related to climate change (SDG 13) in the province of Balochistan, Pakistan. This will also involve assessing the role that assembly member's play, specifically relating to climate finance and budget oversight.

The study will provide an overview of SDG 13 and the opportunities and challenges in Balochistan in terms of achieving the targets under this goal. It will review the climate change references in existing legislation and key documents, including the Rules of Business and process assessment of uptake by the assembly members for resource allocation and policy compliance.

The study will make recommendations to help strengthen legislative and policy frameworks relating to climate change adaptation and mitigation of SDG 13 in Balochistan to improve budget oversight and addressing implementation challenges.

The proposed multi-method assessment will undertake literature review and analysis of secondary documents related to climate change adaptation and mitigation. Data analysis will be guided by predetermined codes and themes that will emerge from document analysis. Based on the information collected focus group discussions, and key informant interviews will help triangulate the research findings which will be validated through a workshop.

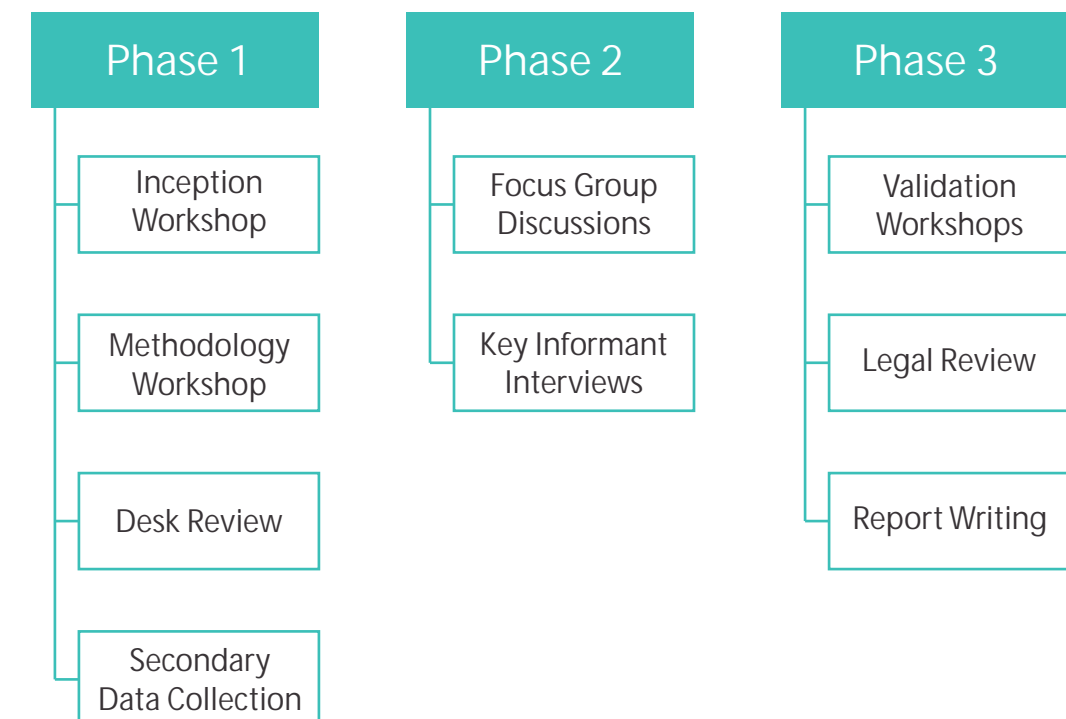


Figure 0-1 Study design

1.2: SDGs Localization and Analytical Framework

Name of Institution	Localized Targets	Function and Responsibility
		<p>Climate Change Impacts</p> <ul style="list-style-type: none"> To gauge how Balochistan impacted by climate change, which climate change impacts have a more pronounced effect on the province To understand how climate change effects the lives and livelihood of the people most affected by climate change To deepen understanding of climate change impacts on the water, energy, and food sectors in the province
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters Balochistan	<p>Strengthening Provincial Adaptive Capacity to climate change impacts</p> <ul style="list-style-type: none"> Understand how the different FGD and KII clusters are contributing towards climate action Stock take of existing or past projects pertaining to climate action in order to assess the different themes relevant to the province (adaptation, mitigation, and DRR) Assess the adaptive capacity of the people on ground to climate change impacts How non-state actors can strengthen provincial adaptive capacity to climate change impacts Stock take of laws and policies applicable to the province, whether they directly or indirectly address climate change Understand how the achievement towards meeting this target can be measured and monitored In order to ensure implementation of the target the recommendations related questions inquire about challenges to implementation, particularly legal and policy reforms needed to reduce implementation gaps.
13.2 Integrate climate change measures into national policies, strategies and planning	13.2 Integrate climate change measures into policies, strategies, and planning in Balochistan	<p>Framework for Climate action: Federal to Provincial</p> <ul style="list-style-type: none"> Assess the existing framework for climate action being followed by the province by stocktaking existing laws, policies, strategies, and plans See if any law, policy, plan, or strategy addresses climate action directly or indirectly, especially post 18th amendment Inquire about the process of policy implementation or development being followed by the province Which regulations or laws protect the policy for climate action, whether direct or indirect Understand how the achievement towards meeting this target can be measured and monitored In order to ensure implementation of the target the recommendations related questions inquire about challenges to implementation, particularly legal and policy reforms needed to reduce implementation gaps

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning in the province	<p>Education and Awareness Raising</p> <ul style="list-style-type: none"> Stock take of any courses, trainings, or programs addressing climate action in the province (particularly adaptation, mitigation, and DRR) Themes around the research being conducted, which aspects of climate action it particularly relates to Any policies, legislation, or regulations facilitating/hindering climate action in the province Understand how the achievement towards meeting this target can be measured and monitored In order to ensure implementation of the target the recommendations related questions inquire about challenges to implementation, particularly legal and policy reforms needed to reduce implementation gaps
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	13.a Implement the commitment undertaken by Federal government and donors to finance climate action in Balochistan in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization.	<p>Accessing Climate Finance</p> <ul style="list-style-type: none"> Analyze the flow of climate funds, where these funds are flowing from and into which themes and sectors Which policies/legislation/regulations facilitate or hinder the flow of climate funds Understand how the achievement towards meeting this target can be measured and monitored In order to ensure implementation of the target the recommendations related questions inquire about challenges to implementation, particularly legal and policy reforms needed to reduce implementation gaps
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in Balochistan, including focusing on women, youth and local and marginalized communities	<p>Capacity building and promoting inclusive approach to implementation</p> <ul style="list-style-type: none"> The questions are designed to inquire about the mechanism for awareness raising, capacity building, and training pertaining to climate action. Ask whether these approaches take into account and inclusive and sensitive approach to implementation.

1.3 Questionnaire – Legislative/policy Gap analysis on SDG 13

Climate Change Impacts

1. Which of the following do you think will affect your area of activity as a consequence of climate change?

- Sea level rise
- Flooding
- Rising temperatures
- Desertification
- Seasonal shifts
- Increasing intensity and frequency of extreme weather events
- Drought
- Erratic rainfall
- Changes in precipitation

2. In Balochistan, how climate change is affective people's daily lives, their livelihood, health and access to basic services?

3. How does climate change affect the water, food, and energy in Balochistan?

Target 13.1: Strengthening Provincial Adaptive Capacity to climate change impacts

4. Which are key departments geared towards reducing climate change impacts?

5. Which policies and laws have been introduced at the provincial level to enhance climate action?

- Do these policies and laws directly or indirectly address climate change issues?
- Are they sufficient to achieve the target?

6. How would you measure the achievement towards achieving this target?

Recommendation

7. What are the major challenges you face in implementation of laws and policies pertaining to the target?

8. What steps need to be taken to bridge the implementation gaps? Which policy and legal reforms would improve the implementation of target?

Target 13.2 Federal to Provincial: Framework for Climate action

9. What is the process to implement national policies at sub-national level?

10. Are you aware of any federal policies and laws pertaining to SDG 13 that apply to Balochistan?

11. What are the challenges (capacity, finance, skill, technology etc.) to implementing federal policies and laws in Balochistan?

12. How would you measure the achievement towards achieving this indicator?

Recommendation

13. What are the major challenges you face in implementation of laws and policies pertaining to the target?

14. What steps need to be taken to bridge the implementation gaps? Which policy and legal reforms would improve the implementation of target?

15. Which bodies have directly or indirectly overseen your work on target?

Target 13.3 Education and Awareness

16. Which policies, laws, and regulations would you think affected the inclusion of climate action in education?

17. How would you measure the achievement towards achieving this indicator?

Recommendation

18. What are the major challenges you face in implementation of laws and policies pertaining to the target?

19. What steps need to be taken to bridge the implementation gaps? Which policy and legal reforms would improve the implementation of target?

Accessing Climate Finance

20. Which policies, legislation, or regulations would you think affected the work in accessing climate finance? What are the key challenges in accessing climate finance?

21. How would you measure the achievement towards achieving this indicator?

22. Which policies, legislation, or regulations would you think affected the work in accessing climate finance? What are the key challenges in accessing climate finance?

23. Are you receiving any aid/fund from the following

- international donors
- federal government
- Provincial Government

24. If yes how are the funds being utilized?

25. How would you measure the achievement towards achieving this indicator?

Recommendations

26. What are the major challenges you face in implementation of laws and policies pertaining to the target?

27. What steps need to be taken to bridge the implementation gaps? Which policy and legal reforms would improve the implementation of target?

28. Which bodies have directly or indirectly overseen your work on SDG 13?

Target 13.b Capacity building and promoting inclusive approach to implementation

29. Is there a mechanism for raising awareness regarding climate action in Balochistan?

30. Are you aware of any trainings or capacity building exercises related to climate action?

31. Do these trainings take into account women, youth, and marginalized communities?

32. Do you have any recommendations?

1.4 Key Informants

Name	Designation	Organization	Category
Mr. Zahid Ahmed Mengal	Executive Director	Azat Foundation	CSO
Dr. Zahoor Bazai	Director, Quality Assurance Director, UoB, Quetta.		CSO
Attaullah Haq	YDO	Youth Association for Development	CSO
Sultan Shahwani	Director/ CEO	HARD	CSO
Kaleem	Consultant	EIA	Academic
Irfan Bakhtiari	Consultant	IUCN/Government/Environment Department	Academic
Rafay Alam	Advocate & Vice-President	Lahore Pakistan Environmental Law Association	Legal Expert
Ghulam Rasool	Chief Statistician	Balochistan Bureau of Statistics	Institutional Expert
Ashraf	Census Incharge	Balochistan Bureau of Statistics	Institutional Expert
Muhammad Aslam Tareen	Director General	PDMA	Institutional Expert
Marva Khan	Teaching Fellow	LUMS Law Department	Legal Expert
Naveed ahmad	Deputy Director	PDMA	Institutional Expert
Rahila Durrani	MPA	Speaker Balochistan Assembly	Member of Parliament
Saeedul Hassan Mandokhail	Senator	Pakistan Muslim League (PML)	Member of Parliament
Agha Shahbaz Khan Durrani	Senator	Pakistan Muslim League Nawaz (PML-N)	Member of Parliament